

**B R F S S**

# **ASSESSING HEALTH RISKS IN MONTANA**

**1999 Survey Results From the  
Montana Behavioral Risk Factor  
Surveillance System**







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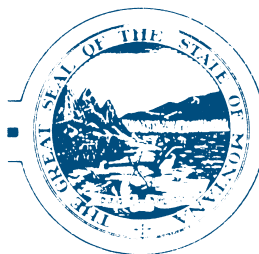
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# DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES



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STATE OF MONTANA

From the Director:

The Montana Department of Public Health and Human Services is pleased to present this report of selected findings based on our 1999 Montana Behavioral Risk Factor Surveillance System (BRFSS) survey results. This 10th report continues the delivery of risk factor information since 1984.

The BRFSS for 1999 involved annual statewide telephone surveys of 1,798 adult residents aged 18 and older. Montana is one of 50 states and several territories funded and supported by the Centers for Disease Control and Prevention to administer monthly telephone interviews to gather health-related data.

The project represents an ongoing surveillance of key risk factors to assess baseline data for identifying and targeting future health trends in Montana. The information serves as a valuable guide for planning health-promotion and disease-prevention activities and can assist health professionals in the public and private sectors in identifying populations at risk.

The results from the 1999 survey indicate that Montana has made substantial progress towards improving public health by meeting or exceeding a number of national Healthy People 2000 Objectives (see Appendix A of this report). However, there is still much work to be done. Also the new Healthy People 2010 Objectives, released in January 2000, provide ambitious benchmarks for public health workers to strive towards in the next decade.

It is our hope that this report will serve as a resource for you and others, helping Montanans make concerted and informed efforts to face the health challenges of Montana's citizens.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gail Gray".

Gail Gray, Ed.D.  
Director



## ACKNOWLEDGMENTS

This report of the 1999 Montana Behavioral Risk Factor Surveillance System (BRFSS) survey results was prepared by the Health Planning and Evaluation Section within the Montana Department of Public Health and Human Services (DPHHS). The design and layout of the report was prepared by Banik Creative Group of Great Falls, Montana. Telephone interviews were conducted by Northwest Resource Consultants of Helena, MT.

The Centers for Disease Control and Prevention (CDC), Behavioral Surveillance Branch provided financial support and technical support for developing the questionnaires, implementing the survey, and processing and weighting data. CDC's financial support has greatly facilitated DPHHS's ability to conduct surveillance of risk factors for preventable injuries and diseases. Also, the interviewing facilities acquired with CDC's financial support have been instrumental in enabling DPHHS to conduct numerous point-in-time BRFSS-like surveys.

Special appreciation is extended to Northwest Resource Consultants' telephone interview team. Their dedication has consistently yielded high quality survey data for the Montana BRFSS.

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## EXECUTIVE SUMMARY

The Montana Behavioral Risk Factor Surveillance System (BRFSS) has been collecting and reporting health behavior data since 1984. The Montana Department of Public Health and Human Services (DPHHS) coordinates the telephone survey under a cooperative agreement with the Centers for Disease Control and Prevention (CDC).

The purpose of the survey is to gather information regarding personal practices, attitudes and knowledge of adult Montanans (aged 18 and older) that contribute to the leading causes of disease in the state. Monthly surveys averaged 150 completed telephone interviews, for a total of 1,798 completed interviews in 1999.

This report summarizes the results of the 1999 Montana BRFSS survey. These results indicate that Montana has achieved a number of national Healthy People 2000 Objectives (see Appendix A for a summary of Montana's status relative to selected objectives.)

### Key Findings for 1999

**No Health Insurance:** Seventeen percent of adult Montanans reported that they had no health insurance.

**Overweight:** More than half (53%) of Montana adults were overweight (BMI\*  $\geq 25$ ) according to the new standard for overweight established by the National Heart, Lung, and Blood Institute (1998). (Thirty percent of adult Montanans were overweight according to the previous standard; BMI  $\geq 27.8$  for males and BMI  $\geq 27.3$  for females.)

**Visit a Dentist in the Past Year:** Nearly two-thirds (64%) of adult Montanans reported that they had visited a dentist in the past 12 months.

**High Blood Pressure:** Nearly a quarter (23%) of Montanans reported that they had been told at some time that they had high blood pressure. Ninety-three percent of adults had had their blood pressure checked within the past two years, as recommended.

**High Cholesterol:** Seventy-one percent of Montana adults had ever had their blood cholesterol checked. Out of that group, 31% had ever been told that their blood cholesterol was high.

**Acute (Binge) Drinking:** Eighteen percent of Montanans reported that they consumed five or more alcoholic drinks on one or more occasions in the past month.

*\*Body Mass Index is used to indicate overweight. BMI is a ratio of weight to height (kg/m<sup>2</sup>)*





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## INTRODUCTION

Each year modifiable behaviors such as smoking, excessive alcohol consumption, overweight, and physical inactivity contribute to a substantial portion of the mortality and morbidity associated with chronic disease and unintentional injury (McKenna et al., 1998; Frazier et al., 1996). Underutilization of preventive health services (e.g., blood pressure, cholesterol, and cervical cancer screening) may also contribute to morbidity and premature death from many diseases. In 1999, 80% of Montana residents died, predominantly from chronic diseases and unintentional injuries (Table 1).

Measuring the prevalence of high risk behaviors and preventive health service utilization provides information for developing and monitoring interventions designed to reduce premature death and disease. From 1981 to 1983, the Centers for Disease Control and Prevention (CDC) funded 29 states to conduct point-in-time prevalence surveys of behaviors that were associated with an increased risk of developing avoidable illness and/or premature death (i.e., behavioral risk factors). In 1984, the CDC established the Behavioral Risk Factor Surveillance System (BRFSS), an annual telephone survey assessing the health status and behavioral risk factors of the adult population (18 years and older) within 15 participating states. Through cooperative agreements between CDC and state departments of public health, the BRFSS has expanded to include all 50 states, the District of Columbia, and three U.S. territories.

Montana has participated in the BRFSS since 1984. The number of Montana adults sampled annually has increased from 855 in 1984 to 1,188 in 1985, and to 1,800 in 1996. The number of questions included in the annual survey has increased from 45 questions in 1984 to 189 questions in 1999. In 1999, 150 interviews were completed each month. Subject areas include perceived health status, access to health care, health awareness, use of preventive services, as well as knowledge and attitudes of health care and health care practices.

The BRFSS survey provides valuable information on health trends, assessing chronic disease risk and monitoring the effectiveness and public awareness of policies, programs, and interventions. Additionally, these data are used to identify important health issues for future attention, formulate policies and legislation, and develop public awareness strategies.

The Healthy People 2000 (Public Health Service 1991, 1995) is a national initiative to improve the health of all Americans through prevention. "The initiative is driven by 319 specific national health promotion and disease prevention objectives targeted for achievement by the year 2000. Healthy People 2000's overall goals are to: 1) increase the span of healthy life, 2) reduce health disparities, and 3) achieve access to preventive services for all Americans."<sup>1</sup> In addition, national 2010 health objectives were released in January 2000<sup>2</sup> (U.S. Department of Health and Human Services 2000). Data from the annual BRFSS survey are the primary means of monitoring progress towards achieving specific national year 2000 health objectives (see Appendix A) and new 2010 objectives.

<sup>1</sup>See <http://www.odphp.osophs.dhhs.gov/pubs/hp2000/>

<sup>2</sup>See <http://www.health.gov/healthypeople/>



This report summarizes selected results from the 1999 survey. Results were tabulated for the overall Montana population, as well as for subpopulations (sex, age class, education level, income class, and two racial categories). The numbers reported in the data tables were the actual numbers of respondents, while the prevalence estimates (as percentages) were calculated using weighted data. Variation in risk behaviors and health characteristics among subpopulations were highlighted when appropriate. Graphs depicting point estimates over time were presented for selected health measures. As a measure of data reliability, 95% confidence intervals (CI) were presented with the percentage prevalence estimates. Readers unfamiliar with interpreting point estimates and confidence intervals may wish to consult the discussion on confidence intervals found in the Methods section of this report.

**Table 1. Behavioral Risk Factors Associated with the Leading Causes of Death in Montana, 1999<sup>+</sup>.**

Rank	Cause of Death	Number of deaths	Percentage of total deaths*	Associated Risk Factors
1	Heart disease	2,034	25.2	Smoking, lack of physical activity, high blood pressure, high-fat diet, high blood cholesterol, over-weight
2	Cancer	1,845	22.8	Smoking, high-fat diet, chronic drinking, environmental exposure
3	Cerebrovascular disease (including stroke)	591	7.3	High-blood pressure, smoking, high blood cholesterol
4	Chronic obstructive pulmonary disease	566	7.0	Smoking, environmental exposure
5	Unintentional injury	461	5.7	Binge and chronic drinking, smoking, non-use of safety belts.
6	Pneumonia and influenza	248	3.1	Smoking
7	Diabetes	243	3.0	Overweight, diet
8	Alzheimer's disease	204	2.5	Binge and chronic drinking
9	Suicide	161	2.0	Unknown
10	Nephritis, Nephrotic Syndrome & Nephrosis	93	1.1	Risk factors associated with hypertension and diabetes, prolonged use of analgesics
	Total deaths from leading causes	6,446	79.7	

<sup>+</sup>Mortality data are from the Montana Department of Public Health and Human Services, Vital Statistics Bureau, 2000.

\*Total deaths from all causes in 1999, excluding fetal deaths, was 8,082.



# METHODS

## Sampling Design

In 1999, Montana used a disproportionate stratified sampling design (DSS)<sup>3</sup> for the BRFSS survey. In the DSS design, the universe of all Montana telephone numbers was disproportionately stratified by telephone blocks. A block consists of 100 phone numbers with consecutive four-digit telephone suffixes (e.g., 406-443-1100 to 406-443-1199). One-plus blocks (high-density stratum) are computer-generated listings of 100 consecutive telephone numbers containing at least one published household telephone number. Zero-blocks (low-density stratum) are listings of 100 consecutive telephone numbers containing no published household telephone numbers. To be representative, both one-plus and zero-plus blocks were randomly sampled, but at a disproportionate rate of 4:1. Once a residence was successfully contacted, individual respondents were randomly selected from all adults aged 18 and older living in the household. The selected adult was then interviewed in accordance with the BRFSS protocol (CDC 1998). In 1999, approximately 150 interviews were completed each month, for a yearly total of 1,798 interviews.

Interviews were conducted by Northwest Resource Consultants (Helena, MT) at facilities located at the Montana Department of Public Health and Human Services. Interviews were conducted during daytime and evening hours on Monday through Friday and during daytime hours on weekends to ensure that selected individuals had ample opportunity to participate in the survey. Fifteen efforts were made to reach a phone number at different times of the day and evening and on different days before being classified as an unreachable number. The Council of American Survey Research Organizations response rate estimate for 1999 was 71.7 percent. Five percent of completed interviews were verified by recontacting the respondent. Respondents selected for verification were contacted by an interviewer who did not conduct the original interview.

## Data Weighting and Analysis

Data were weighted to account for differences in the probability of selection (e.g., households with more than one telephone number were more likely to be called). Post-stratification weighting based upon the population estimates for the 1999 Montana population was used to ensure that the results more closely reflected the adult population of Montana.

A comparison of the demographic characteristics of the 1999 survey sample with 1999 Census Bureau population estimates indicates that several population subgroups were either under- or over-represented in the samples (Table 2). Males and the 18 to 29 year-old age class were under-represented, while females and the 65-year-and-older age class were over-represented in the survey. Other subgroupings appear to have been sampled approximately according to their estimated occurrence in the population. The post-stratification weighting tends to correct for the apparent sampling error.

<sup>3</sup>For a detailed description of BRFSS methodology, see the *BRFSS Surveillance Guide*, an online version of the *BRFSS Users Guide* at: <http://www.cdc.gov/nccdphp/brfss/training.htm>



**Table 2. Demographic Distribution of the 1999 Montana BRFSS Survey Sample and 1999 U.S. Census Bureau estimates for the Montana adult population.**

Demographic Group	BRFSS Sample			1999 Census Bureau Estimate	Percent Total of Population
	1999	UW	Percent* (W)		
<b>All Adults</b>	1,798			658,960	
<b>Sex:</b>					
Male	768	42.7	(48.7)	323,506	49.1
Female	1,043	57.3	(51.3)	335,454	50.9
<b>Age:</b>					
18 - 29	280	15.6	(20.4)	136,823	20.8
30 - 34	516	28.7	(28.5)	184,056	27.9
45 - 64	614	34.1	(30.7)	220,842	33.5
65+	386	21.5	(19.3)	117,239	17.8
Unknown	2				
<b>Education:</b>					
<High School	175	9.7	(10.0)	Not available	
High School	619	34.4	(35.0)	Not available	
Some College	510	28.4	(27.4)	Not available	
College Degree	491	27.3	(27.5)	Not available	
Unknown	3				
<b>Income:</b>					
<\$10,000	87	4.8	(3.8)	Not available	
\$10,000 - \$19,999	240	13.3	(11.8)	Not available	
\$20,000 - \$34,999	487	27.1	(26.7)	Not available	
\$35,000 - \$49,999	274	15.2	(15.3)	Not available	
\$50,000+	314	17.5	(18.6)	Not available	
Unknown	396				
<b>Race:</b>					
White, non-Hispanic	1,671	92.9	(92.3)	611,503	92.8
Non-white or Hispanic	122	6.8	(7.2)	47,457	7.8
Unknown	5				

\*Unweighted (UW) and weighted (W) percentages.

Respondents who indicated “don’t know,” “not sure,” or “refused” were excluded from the calculation of prevalence estimates. The SPSS® statistical package (SPSS, Inc.) and the WesVar® Complex Samples™ module (Westat 1998) were used to compute prevalence estimates (expressed as percentages) and associated 95% confidence intervals using sample weights provided by CDC. Prevalence estimates based on denominators with fewer than 50 respondents were not reported due to their inherent low reliability.

### Data Reliability and 95% Confidence Intervals

As noted earlier, the BRFSS data represent a sample of the Montana adult population. It is not feasible to query the entire Montana population, so the sample is used to estimate population prevalences for health-risk behaviors. The reliability of a sample statistic (e.g., prevalence) can be estimated by setting a confidence interval (sometimes referred to as the margin of error) around the statistic. By convention, 95% confidence intervals are generally used.

As an example, a prevalence estimate for cigarette smoking of 20% with a computed 95% confidence interval of  $\pm 2\%$ , translates to a lower limit of 18% and an upper limit of 22%. There is a 95% probability that the interval 19% to 23% includes the true percentage of smokers in the Montana population.

The width of a confidence interval (e.g.,  $\pm 2\%$ ) is dependent upon sample size. Estimates based on large samples have narrower confidence intervals and are more reliable than are estimates based on small samples. Confidence intervals must be considered when making comparisons among subgroups of the population (e.g., among age classes). Percentages for different subgroups of the population can be determined to be significantly different if their confidence intervals do not overlap. A statistical test is needed to determine if estimates are likely to be different when the confidence intervals overlap.

Analysis of subpopulations results in a concomitant lowering of sample size. The more subgroups into which the data are partitioned, the smaller the sample size per subgroup. The results presented in this report include some instances where sample sizes for subgroups within select populations (e.g., breast screening for women aged 50 and older or colorectal cancer screening among adults aged 50 and older) were too small, and the associated 95% confidence intervals too broad, to yield meaningful comparisons among subgroups.

## Questionnaire

The BRFSS questionnaire has three parts: the core, consisting of the fixed core questions (asked every year), rotating core questions (asked in alternating years), and emerging core questions (asked for only one year); optional modules provided by CDC, any number of which can be selected by individual states for inclusion; and state-added questions (additional questions of specific interest to individual states).

All states must ask the core questions without modification in wording. As part of the core, in addition to questions on health-related behaviors, respondents are also asked to provide demographic information including sex, age, race, marital status, annual household income, employment status, and education level. Optional modules and state-added questions are added by individual states to their respective questionnaires.

The 1999 Montana BRFSS Questionnaire consisted of 189 questions. Not all respondents received all questions, since some questions pertain to a specific age group or sex, or persons with a particular condition (e.g., diabetes). The average length of time to administer the survey was 18 minutes in 1999.

## Survey Limitations

Surveys that require self-reporting of data have limitations and should be interpreted with caution. Respondents may have the tendency to under-report behaviors that are socially undesirable, unhealthy, or illegal (e.g., drinking and driving or smoking), while over-reporting desirable behaviors (e.g., amount of exercise or regular health screening). The accuracy of self-reported information also is affected by the ability of respondents to fully recall past behaviors or health screening results.

Telephone surveys exclude households without telephones, which may result in a biased survey population due to under-representation of certain segments of the population. An estimated 96% of Montana households have at least one residential telephone. The four percent of homes without telephones may represent a population segment at high risk for preventable diseases associated with low socioeconomic status. The sampling procedures make no special effort to reach populations among which telephone lines per capita is lower than the norm.





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## SURVEY RESULTS



## HEALTH STATUS

### How would you say your general health is?

- Eleven percent of Montana adults described their general health as “fair” or “poor” in 1999.
- Females (13%) reported fair or poor health more frequently than did males (9%).
- The prevalence of “fair” or “poor” health was positively associated with age. Adults aged 45 and older reported “fair” or “poor” health more frequently than did younger adults.
- Adults with less than a high school education were much more likely to report their general health as “fair” or “poor” compared to adults with higher levels of education.
- Adults with lower annual household income (<\$20,000) reported higher percentages ( $\geq 23\%$ ) of “fair” or “poor” health compared to adults with higher household income (<10%).
- Non-white or Hispanic adults (20%) were more likely to report “fair” or “poor” health than were white adults (10%).
- Since 1993, the percentage of adults reporting “fair” or “poor” health has remained relatively constant.

### How many days during the past month was your physical health not good?

- Thirty-three percent of Montana adults in 1999 indicated that their physical health was not good on one or more days in the previous month.
- More females (38%) than males (27%) reported that their physical health was not good on one or more days in the previous month.
- Adults aged 18 to 29 reported one or more days of poor physical health more frequently (40%) than did older adults (<32%).
- Percentages of those adults reporting one or more days of poor physical health decreased with increasing levels of annual household income.

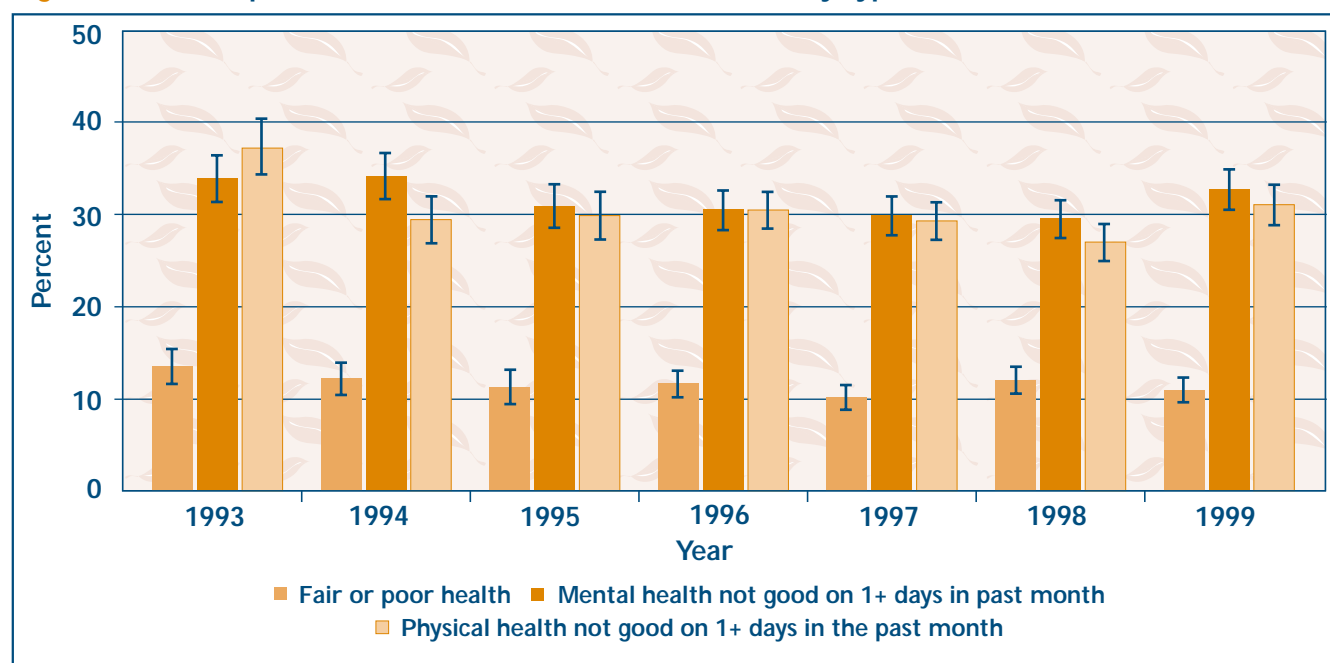
### How many days during the past month was your mental health not good?

- Thirty-one percent of Montana adults in 1999 reported that there were one or more days during the past month when their mental health was not good.
- Females (37%) reported one or more days of poor mental health more frequently than did males (25%).
- The percentage of adults reporting one or more days of poor mental health declined with increasing age class.
- The percentage of adults aged 65 and older reporting poor mental health (12%) was substantially lower than younger age classes (27% to 41%).
- Adults with annual household incomes less than \$10,000 were much more likely to report one or more days of poor mental health (54%) than adults in higher income brackets (<34%).

**Table 3. Health Status, Montana Adults, 1999 (with 95% confidence intervals).**

	Fair or poor health				Physical health not good 1+ days in past month				Mental Health not good 1+ days in past month			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults:</b>	1792	233	10.9	(1.5)	1770	585	32.6	(2.4)	1744	558	31.0	(2.4)
<b>Sex:</b>												
Male	765	74	8.9	(2.1)	758	207	27.3	(3.5)	748	196	24.7	(3.4)
Female	1027	149	12.8	(2.1)	1012	378	37.7	(3.3)	996	362	37.0	(3.4)
<b>Age:</b>												
18 - 29	280	8	2.8	(2.2)	278	113	40.3	(6.4)	277	121	41.3	(6.4)
30 - 44	516	47	8.2	(2.5)	513	159	30.7	(4.3)	510	212	39.9	(4.7)
45 - 64	612	79	12.3	(2.7)	607	200	31.3	(3.9)	595	179	27.2	(3.8)
65+	382	87	21.1	(4.4)	370	112	29.4	(5.1)	360	46	11.5	(3.4)
<b>Education:</b>												
<High School	173	60	30.9	(7.3)	168	67	40.9	(8.3)	135	48	28.3	(7.6)
High School	617	77	11.3	(2.7)	608	184	29.9	(4.0)	602	167	27.2	(4.0)
Some College	509	61	10.0	(2.6)	501	181	35.5	(4.7)	491	186	37.2	(4.8)
College Degree	490	107	4.0	(1.7)	490	153	30.4	(4.4)	484	157	30.7	(4.5)
<b>Income:</b>												
<\$10,000	87	25	23.4	(9.2)	83	43	50.1	(12.4)	85	46	54.4	(12.3)
\$10,000 - \$19,999	239	59	23.0	(5.8)	238	82	36.0	(7.0)	232	76	31.4	(6.7)
\$20,000 - \$34,999	486	52	9.9	(2.8)	482	174	35.9	(4.7)	479	169	34.2	(4.8)
\$35,000 - \$49,999	274	14	4.6	(2.5)	273	82	29.6	(5.8)	269	88	30.6	(5.8)
\$50,000+	314	11	3.4	(2.1)	313	82	25.3	(5.2)	311	104	33.4	(5.9)
<b>Race:</b>												
White, non-Hispanic	1666	193	10.2	(1.5)	1645	533	32.1	(2.5)	1623	510	30.5	(2.5)
Non-white or Hispanic	121	29	19.7	(7.3)	120	50	39.8	(9.7)	117	47	37.8	(9.8)

**Figure 1. Self-Reported Health Status of Montana Adults by Type, 1993-1998.**





## HEALTH CARE ACCESS

### Do you have any kind of health care coverage?

- Seventeen percent of Montana adults reported they were uninsured in 1999.
- The percentage of uninsured adults has remained relatively constant since 1991.
- Percentage of uninsured adults was inversely associated with age, income, and education levels.
- Only 1% of adults aged 65 and older reported being uninsured (due to Medicare coverage).

### How long has it been since you visited a doctor for a routine checkup?

- In 1999, 64% of Montana adults reported they had had a routine checkup in the past 12 months.
- The percentage of adults reporting they had had a checkup in the past year has changed little since 1993.
- More females (75%) had a checkup in the past year than did males (52%).
- More adults aged 65 and older (84%) had a checkup in the past year than did adults in younger age classes (<66%).
- Education, income, and race had little influence on the percentage of adults who had a checkup in the past year.

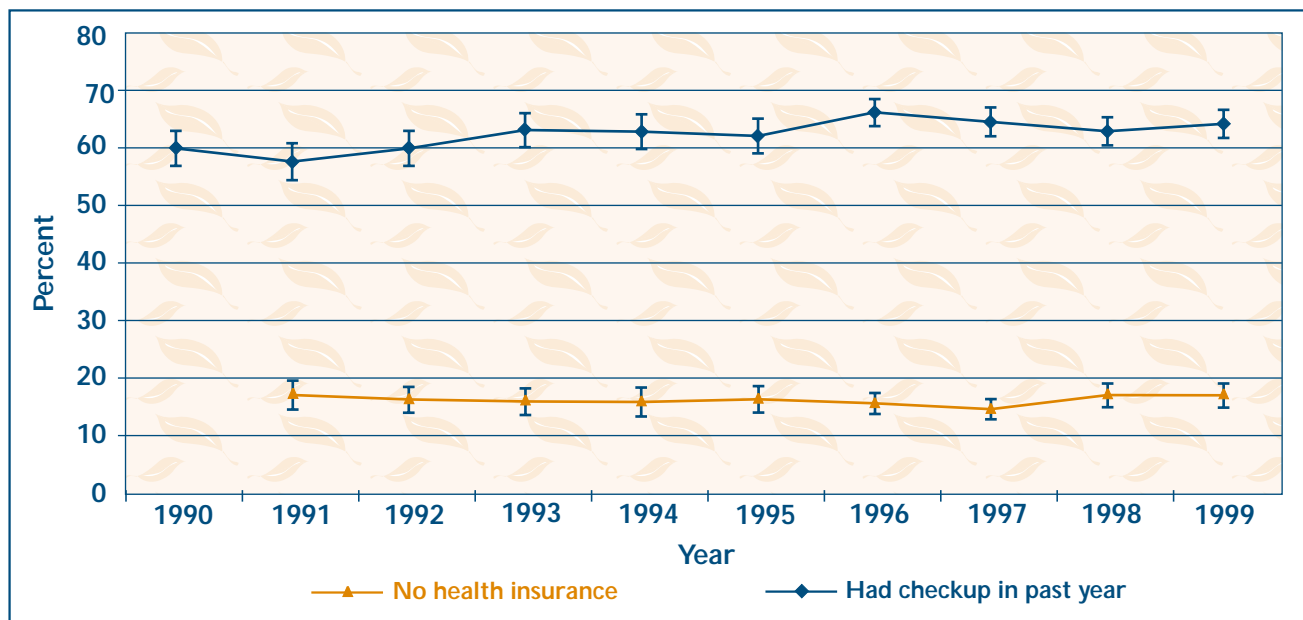
### Did you need to see a doctor in the past year, but could not because of the cost?

- Twelve percent of Montana adults reported in 1999 that they could not afford to see doctor in the past year.
- The percentage of adults who could not afford a doctor in the past year was inversely associated with age, education, and income levels. Higher percentages of adults under 65 years of age, of adults with less than a college degree, and of adults with annual household incomes less than \$20,000 reported that they could not afford to see a doctor in the past year.
- More non-white or Hispanic adults (24%) reported that they could not afford to see a doctor in the past year compared to white, non-Hispanic adults (12%).

**Table 4. Health Care Access, Montana Adults, 1999 (with 95% confidence intervals).**

	No health insurance				Had routine checkup in past year				Couldn't afford doctor in past year			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults: 1999</b>	1796	283	17.0	(2.0)	1763	1163	64.2	(3)	1794	222	12.4	(1.7)
<b>Sex:</b>												
Male	767	128	17.1	(3.0)	752	399	52.7	(4)	766	81	10.4	(2.4)
Female	1029	155	16.9	(2.8)	1011	764	75.0	(3)	1028	141	14.4	(2.4)
<b>Age:</b>												
18 - 29	279	73	27.5	(5.9)	276	153	52.8	(7)	279	49	18.5	(5.3)
30 - 44	516	116	23.6	(4.3)	509	298	58.0	(5)	516	77	13.8	(3.1)
45 - 64	523	116	13.9	(2.9)	604	404	65.6	(4)	614	75	11.9	(2.7)
65+	386	4	0.7	(0.8)	373	307	83.5	(4)	383	21	4.8	(5.2)
<b>Education:</b>												
<High School	175	32	20.5	(7.0)	168	122	71.9	(7.8)	172	29	18.1	(6.5)
High School	619	128	22.1	(3.8)	605	406	64.5	(4.3)	618	83	13.5	(3.1)
Some College	508	72	16.1	(4.0)	500	314	62.1	(4.7)	510	79	15.6	(3.6)
College Degree	491	51	10.2	(3.0)	488	321	63.2	(4.9)	491	31	5.9	(2.2)
<b>Income:</b>												
<\$10,000	87	21	24.9	(10.5)	86	60	65.2	(12.1)	87	30	32.6	(11.2)
\$10,000 - \$19,999	238	80	35.6	(7.1)	234	151	62.9	(7.0)	239	62	27.3	(6.6)
\$20,000 - \$34,999	487	84	20.6	(4.4)	482	300	60.6	(4.9)	487	64	13.5	(3.4)
\$35,000 - \$49,999	274	23	8.3	(3.5)	272	186	67.9	(6.0)	274	18	7.4	(3.5)
\$50,000+	314	21	7.1	(3.6)	312	210	66.0	(6.1)	314	10	3.5	(2.2)
<b>Race:</b>												
White, non-Hispanic	1669	252	16.2	(2.1)	1641	1079	64.2	(2.6)	1668	190	11.5	(1.7)
Non-white or Hispanic	122	30	27.1	(9.1)	117	82	64.3	(9.9)	122	31	23.9	(8.3)

**Figure 2. Health Care Access, Montana Adults, 1990-1999.**



# OVERWEIGHT & OBESITY

## Overweight adults:

- In 1999, 53% of Montana adults were at risk for being overweight according to the new Body Mass Index (BMI) classification of overweight (i.e., BMI  $\geq 25$ ).
- According to the old classification for overweight used for Healthy People 2000 Objective 1.2 listed below, 30% ( $\pm 2\%$ ) of Montana adults aged 18 and older were overweight in 1999.
- From 1990 to 1999, there was an increase in the prevalence of overweight among Montana adults.
- Males (62%) were substantially more likely to be overweight than females (44%).
- Fewer adults aged 18 to 29 year olds (35%) were overweight than adults in older age classes ( $>50\%$ ).
- Education, income, and race had relatively little influence upon the percentage of adults who were overweight.

*Note: Body Mass Index (BMI) is used to indicate overweight. BMI is a ratio of weight to height [kg/m<sup>2</sup> or (lbs. x 700)/in.<sup>2</sup>]. The BMI standard for overweight was changed by the National Heart, Lung, and Blood Institute (1998) to BMI  $\geq 25$  for both sexes. Previously, overweight was defined as BMI  $\geq 27.8$  for males and  $\geq 27.3$  for females, which was the standard used by Healthy People 2000.*

## Obese adults:

- Sixteen percent of Montana adults were at risk for obesity (i.e., BMI  $\geq 30$ )
- From 1990 to 1999 there has been a steady increase in the prevalence of obesity among Montana adults.
- Adults aged 30 and older ( $>16\%$ ) were more likely to be at risk for obesity than adults less than 30 years of age ( $<9\%$ ).
- Education, income, and race had little discernable influence on the prevalence of obesity among adults.

*Note: According to the National Heart, Lung, and Blood Institute (1998), persons with a BMI  $\geq 30$  are at risk for being obese.*

## Healthy People 2000 Objectives:

- 1.2 Reduce overweight (BMI  $\geq 27.8$  for males and BMI  $\geq 27.3$  for females) to a prevalence of no more than 20 percent among people aged 20 and older.

## Healthy People 2010 Objectives:

- 19-1 Increase the proportion of adults (to at least 60 percent) who are at a healthy weight ( $18.5 \leq \text{BMI} \leq 25.0$ ).



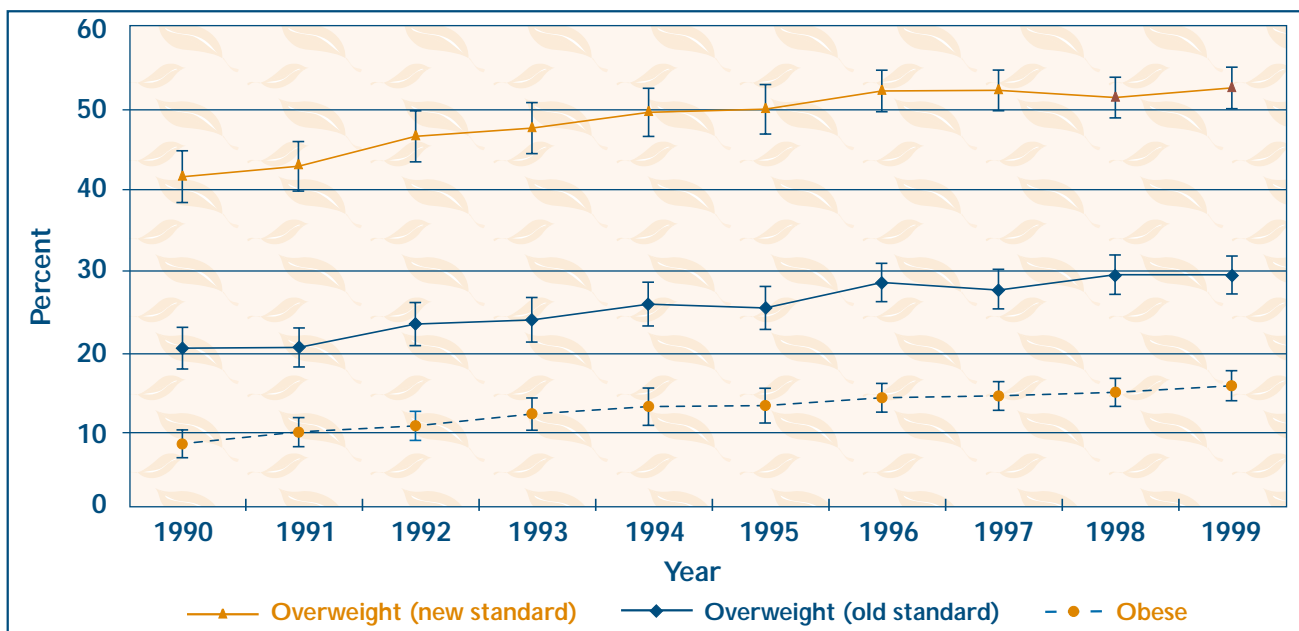
**Table 5. Overweight and Obesity, Montana Adults, 1999  
(with 95% confidence intervals).**

	Overweight*				Obese^			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults:</b> 1999	1743	916	52.7	(2.6)	1743	275	15.8	(1.9)
<b>Sex:</b>								
Male	765	478	61.6	(3.9)	765	132	17.3	(2.9)
Female	978	438	43.8	(3.4)	978	143	14.3	(2.4)
<b>Age:</b>								
18 - 29	273	95	34.8	(6.2)	273	23	8.5	(3.7)
30 - 44	501	241	50.5	(4.9)	501	84	17.7	(3.8)
45 - 64	597	373	62.6	(4.2)	597	114	18.4	(3.3)
65+	372	207	59.0	(5.6)	372	54	16.5	(4.4)
<b>Education:</b>								
<High School	168	88	53.3	(8.4)	168	28	17.8	(6.5)
High School	597	314	52.9	(4.5)	597	100	17.2	(3.4)
Some College	495	255	51.6	(4.9)	495	76	15.6	(3.6)
College Degree	480	257	53.0	(5.0)	480	70	13.6	(3.2)
<b>Income:</b>								
<\$10,000	85	37	43.4	(12.2)	85	15	15.0	(8.0)
\$10,000 - \$19,999	230	128	57.5	(7.3)	230	49	22.5	(6.1)
\$20,000 - \$34,999	474	248	51.4	(5.0)	474	71	14.8	(3.5)
\$35,000 - \$49,999	266	154	58.6	(6.4)	266	38	15.0	(4.7)
\$50,000+	310	164	53.3	(6.3)	310	49	16.1	(4.7)
<b>Race:</b>								
White, non-Hispanic	1619	845	52.3	(2.7)	1619	148	15.3	(1.9)
Non-white or Hispanic	119	70	59.5	(9.9)	119	26	23.1	(8.6)

\*Overweight = BMI  $\geq 25$

^Obese = BMI  $\geq 30$

**Figure 3. Montana Adults Who are Overweight or Obese according to Body Mass Index, 1990-1999.**



# ORAL HEALTH

## How long since you last visited a dentist?

- In 1999, 64% of Montana adults reported that they had visited a dentist in the past 12 months.
- The percentage of adults who visited a dentist in the past year increased with increasing education and annual household income levels.

## How many of your permanent teeth have been removed due to tooth decay or gum disease?

- In 1999, 19% of Montana adults reported having had six or more permanent teeth removed.
- The percentage of adults who reported having had six or more permanent teeth removed increased with increasing age. Only 1% of adults aged 18 to 29 reported having six or more teeth removed compared with 50% of adults aged 65 and older. Of adults aged 65 and older, 29% ( $\pm$  5%) reported having had all their permanent teeth removed.
- The percentages of adults reporting that they had six or more teeth removed declined with increasing education and income levels.

## How long has it been since you had your teeth “cleaned” by a dentist or dental hygienist?

- Sixty-two percent of Montana adults who had teeth in 1999 reported having had their teeth cleaned by a dentist or dental hygienist in the past year.
- More females (67%) reported having had their teeth cleaned in the past year than males (56%).
- The percentage of adults who had their teeth cleaned by a dentist or dental hygienist in the past year increased with increasing education and annual household income levels.
- More white non-Hispanic adults (63%) had their teeth cleaned by a dentist or dental hygienist in the past year than non-white or Hispanic adults (49%).

## Healthy People 2000 Objective:

- 13.3 Increase to at least 45 percent the proportion of people aged 35 to 44 who have never lost a permanent tooth due to dental caries or periodontal diseases.
- 13.4 Reduce to no more than 20 percent the proportion of people aged 65 and older who have lost all of their natural teeth.
- 13.14 Increase to at least 70 percent the proportion of people aged 35 and older using the oral health care system each year.

## Healthy People 2010 Objective:

- 21-3 Increase the proportion of adults (to at least 45 percent) who have never had a permanent tooth extracted because of dental caries or periodontal disease.
- 21-4 Reduce the proportion of older adults (to no more than 20 percent) who had all their natural teeth extracted.
- 21-10 Increase the proportion of children and adults (to 83 percent) who use the oral health care system each year.

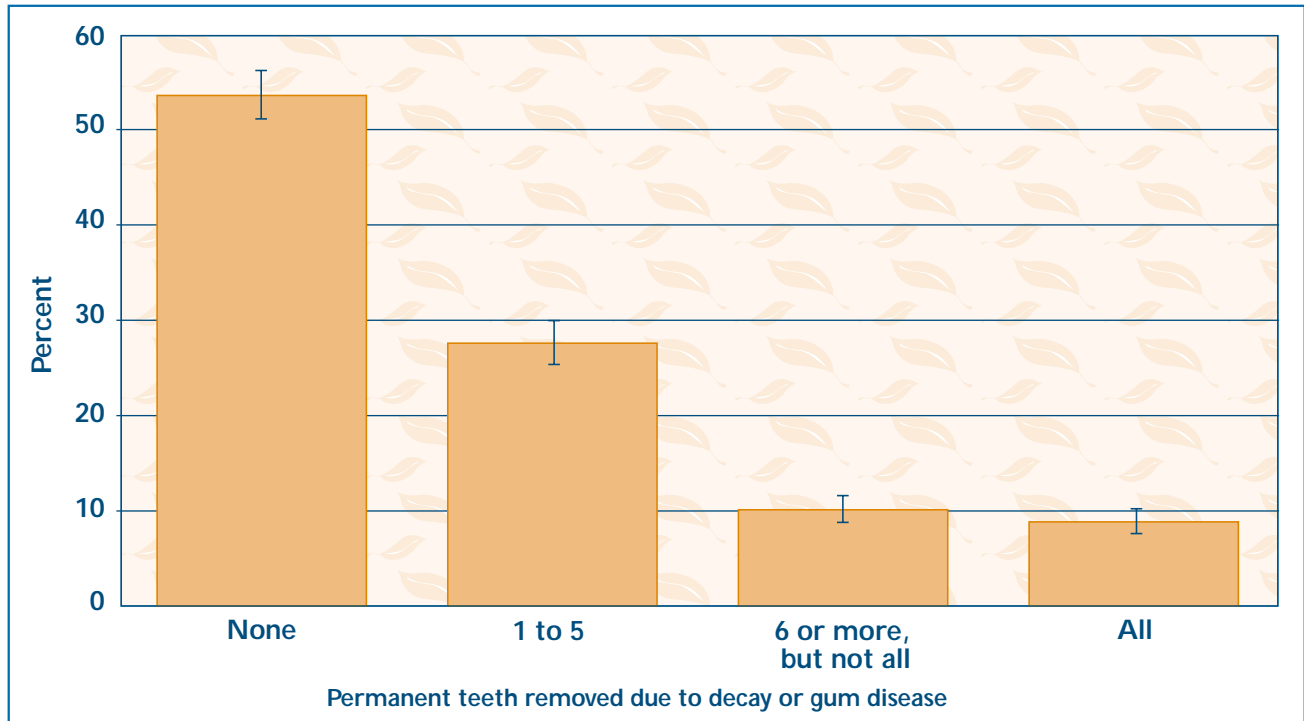
**Table 6. Oral Health, Montana Adults, 1999 (with 95% confidence intervals).**

	Visited dentist in the past year				Had 6 or more permanent teeth removed				Teeth cleaned in the past year*			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults: 1999</b>	1787	1153	63.7	(2.5)	1781	390	18.9	(1.9)	1581	996	61.7	(2.7)
<b>Sex:</b>												
Male	761	457	60.4	(3.8)	761	146	16.9	(2.7)	689	389	56.3	(4.1)
Female	1026	696	66.7	(3.3)	1020	244	20.8	(2.6)	892	607	66.9	(3.5)
<b>Age:</b>												
18 - 29	279	182	63.9	(6.3)	279	3	1.1	(1.5)	277	168	58.9	(6.5)
30 - 44	512	323	61.2	(4.8)	514	28	5.2	(2.0)	505	297	57.8	(4.8)
45 - 64	611	428	67.8	(4.1)	603	152	24.6	(3.7)	547	361	64.9	(4.4)
65+	383	219	60.5	(5.4)	384	207	49.9	(5.6)	250	170	68.3	(6.4)
<b>Education:</b>												
<High School	174	89	54.7	(8.2)	173	85	41.5	(8.0)	123	66	54.7	(9.9)
High School	612	372	59.7	(4.4)	611	175	24.6	(3.6)	523	307	56.6	(4.8)
Some College	507	319	62.3	(4.8)	509	92	15.7	(3.2)	459	284	61.1	(5.1)
College Degree	491	372	73.4	(4.4)	486	38	6.7	(2.3)	473	339	70.3	(4.6)
<b>Income:</b>												
<\$10,000	87	43	47.9	(12.2)	86	30	30.4	(10.5)	68	27	42.4	(14.0)
\$10,000 - \$19,999	239	127	50.2	(7.3)	240	78	29.1	(6.2)	199	108	50.7	(8.0)
\$20,000 - \$34,999	481	297	59.3	(4.9)	483	87	17.2	(3.6)	466	253	53.4	(5.2)
\$35,000 - \$49,999	274	189	66.4	(6.1)	269	34	11.7	(3.9)	257	172	65.3	(6.3)
\$50,000+	314	254	79.5	(5.2)	312	27	7.1	(2.8)	304	234	76.2	(5.4)
<b>Race:</b>												
White, non-Hispanic	1660	1072	64.0	(2.6)	1656	361	18.7	(1.9)	1466	936	62.9	(2.8)
Non-white or Hispanic	122	78	61.0	(10.0)	120	28	22.0	(7.9)	111	58	48.7	(10.6)

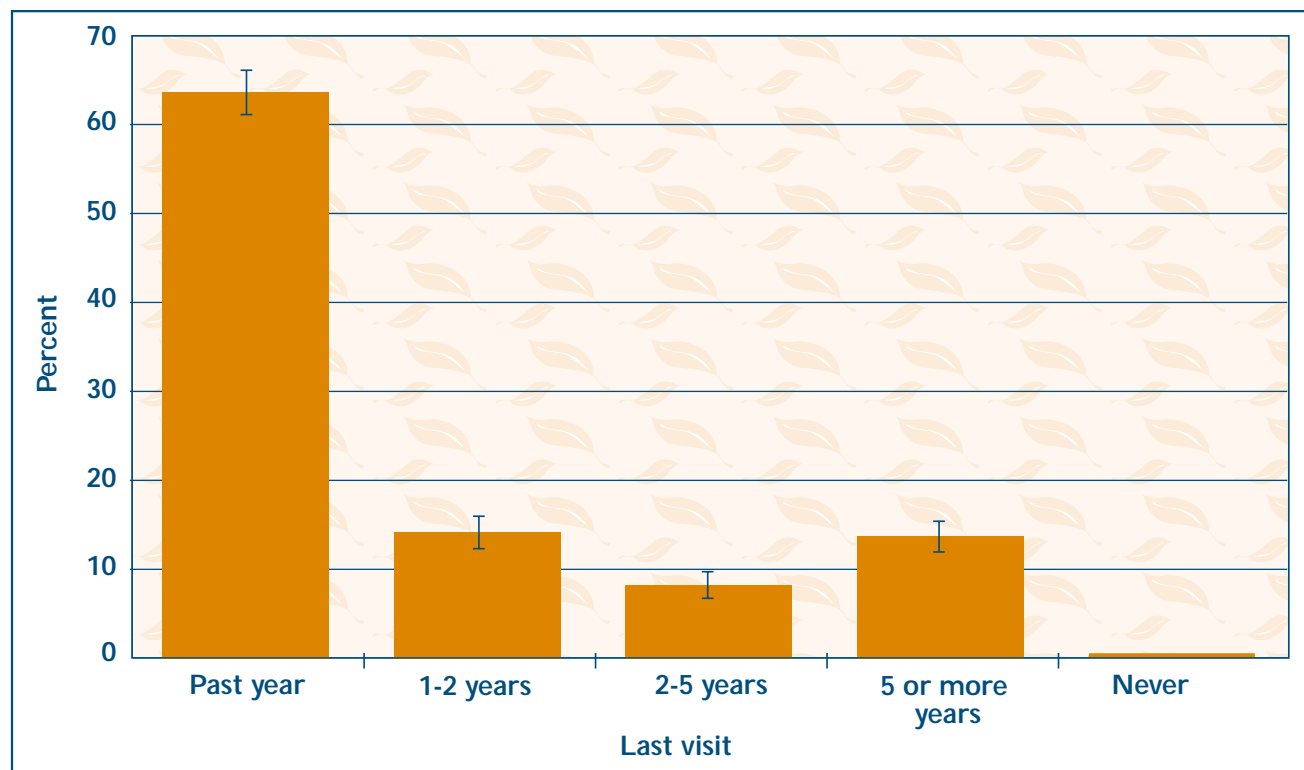
\*Denominator includes those people who have ever visited a dentist or dental clinic and who have teeth.



**Figure 4.** Permanent Teeth Removed, Percent of Montana Adults by Number of Teeth, 1999.



**Figure 5.** Last Visit to a Dentist or Dental Clinic, Percent of Montana Adults by Time Period, 1999.



# HYPERTENSION AWARENESS

## Were you ever told that your blood pressure was high?

- In 1999, 23% of Montana adults had been told at some time by a health care professional that their blood pressure was high.
- Sex and education level had little effect with respect to respondents having been told they had high blood pressure.
- The percentage of adults who had ever been told they had high blood pressure increased with increasing age class.
- The percentage of adults reporting high blood pressure has remained approximately the same between 1990 and 1999.

## Have you had your blood pressure checked in the past two years?

- Ninety-three percent of Montana adults in 1999 reported having had their blood pressure checked in the last two years.
- Women (96%) were more likely than men (91%) to have had their blood pressure checked in the last two years.
- Adults aged 65 and older (97%) were more likely to have had their blood pressure checked in the last two years than adults less than 65 years of age (<94%).
- Education, income, and race had little discernable effect on whether or not adults had their blood pressure checked in the past two years.
- Since 1990, there has been little or no change in the percentages of adults reporting that they had their blood pressure checked in the past two years.

## Healthy People 2000 Objective:

- 15.13 Increase to at least 90 percent the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

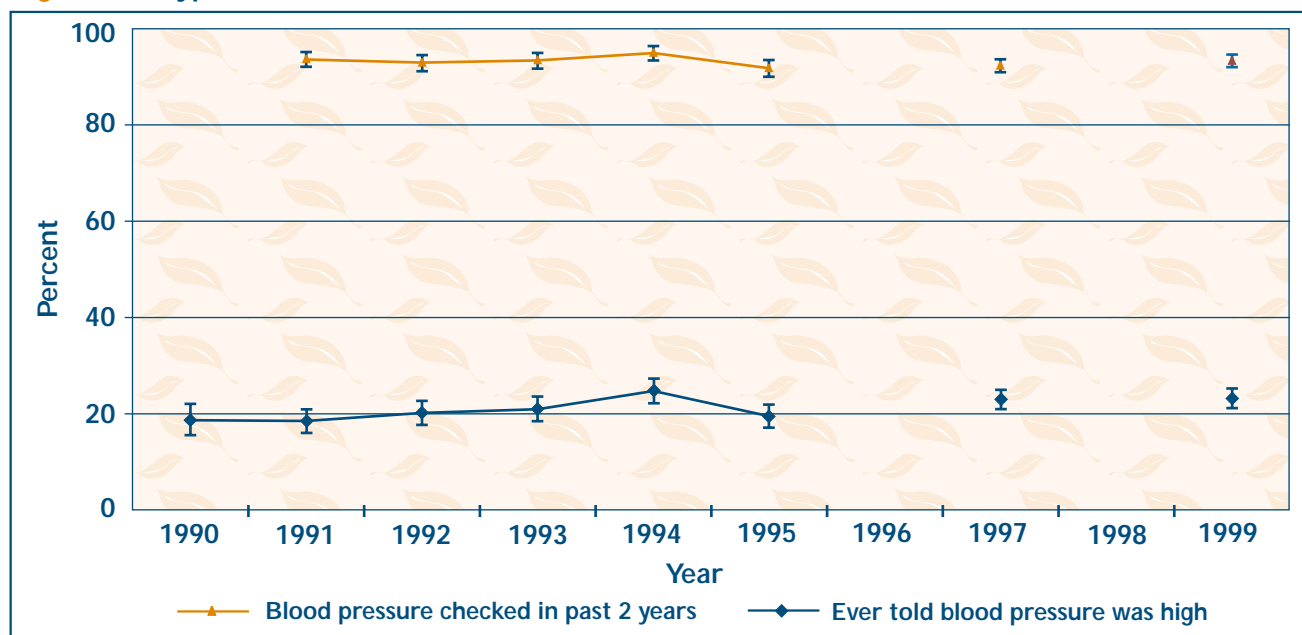
## Healthy People 2010 Objective:

- 12-12 Increase the proportion of adults (to at least 95%) who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

**Table 7. Hypertension Awareness, Montana Adults, 1999  
(with 95% confidence intervals).**

	Ever told blood pressure was high				Blood pressure checked in the last 2 years			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults:</b>								
1999	1791	454	23.2	(2.1)	1768	1652	93.3	(1.3)
<b>Sex:</b>								
Male	762	180	22.1	(3.1)	755	686	90.8	(2.3)
Female	1029	274	24.3	(2.7)	1013	966	95.6	(1.4)
<b>Age:</b>								
18 - 29	277	15	4.3	(2.3)	273	248	90.3	(4.0)
30 - 44	515	74	13.8	(3.2)	510	474	92.5	(2.6)
45 - 64	612	185	31.1	(4.0)	606	564	93.4	(2.1)
65+	385	179	44.6	(5.5)	378	365	97.4	(1.5)
<b>Education:</b>								
<High School	175	52	26.0	(6.9)	171	160	93.9	(4.0)
High School	617	163	24.2	(3.6)	607	567	92.6	(2.5)
Some College	508	137	24.2	(3.9)	501	460	92.3	(2.6)
College Degree	489	102	20.0	(3.8)	486	462	94.8	(2.2)
<b>Income:</b>								
<\$10,000	87	28	29.1	(10.6)	86	78	91.2	(6.4)
\$10,000 - \$19,999	239	68	25.7	(6.0)	239	217	91.0	(4.1)
\$20,000 - \$34,999	486	116	23.0	(4.0)	478	444	92.0	(2.9)
\$35,000 - \$49,999	272	65	24.4	(5.5)	270	257	95.9	(2.4)
\$50,000+	314	58	17.1	(4.4)	313	294	93.5	(3.0)
<b>Race:</b>								
White, non-Hispanic	1664	414	23.0	(2.1)	1642	1553	93.2	(1.4)
Non-white or Hispanic	122	38	25.6	(8.1)	121	114	93.9	(4.7)

**Figure 6. Hypertension Awareness, Montana Adults, 1990-1999.**





# CHOLESTEROL AWARENESS

## Have you ever had your blood cholesterol checked?

- In 1999, 71% of Montana adults reported having ever had their blood cholesterol checked, with little difference between sexes.
- The percentage of adults having ever had their blood cholesterol checked increased with increasing age, education, and income levels.
- White non-Hispanic adults (73%) were more likely to have ever had their blood cholesterol checked than were non-white or Hispanic adults (51%).

## Have you had your blood cholesterol checked in the past five years?

- In 1999, 65% of Montana adults reported having had their blood cholesterol checked in the past five years, with little difference between sexes.
- The percentage of adults reporting that they had their cholesterol checked in the past five years has changed little since 1992.
- The percentage of adults reporting having had their blood cholesterol checked during the past five years increased with increasing age, education, and income levels.
- White, non-Hispanic adults (66%) were more likely to have had their blood cholesterol checked in the past five years than were non-white or Hispanic adults (49%).

## Were you ever told your blood cholesterol was high?

- Thirty-one percent of Montana adults reported in 1999 that they had ever been told by a health care professional that their blood cholesterol was high.
- As age class increased, a greater percentage of adults reported having been told their blood cholesterol level was high. More adults aged 45 and older (>33%) had been told their blood cholesterol was high relative to adults less than 45 years of age ( $\leq 22\%$ ).
- Adults with less than a high school education were more likely to report having ever been told that their blood cholesterol was high (41%) compared to adults with higher levels of education ( $\leq 31\%$ ).

## Healthy People 2000 Objective:

- 15.14 Increase to at least 75 percent the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.

## Healthy People 2010 Objective:

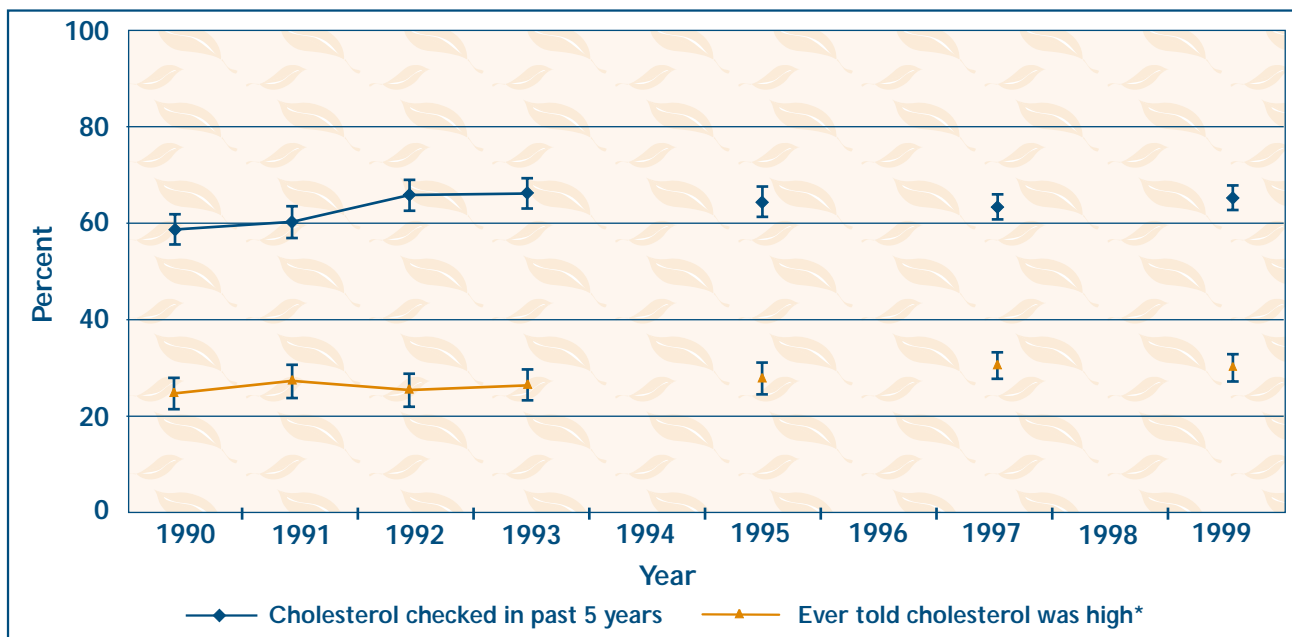
- 12-15 Increase the proportion of adults (to at least 80 percent) who have had their blood cholesterol checked within the preceding 5 years.

**Table 8. Cholesterol Awareness, Montana Adults, 1999 (with 95% confidence intervals).**

	Ever had blood cholesterol checked				Blood cholesterol checked in past 5 years				Ever told blood cholesterol high*			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults: 1999</b>	1741	1284	71.3	(2.4)	1708	1144	65.0	(2.6)	1269	387	30.5	(2.8)
<b>Sex:</b>												
Male	742	528	69.2	(3.8)	732	478	63.7	(3.9)	522	168	31.8	(4.4)
Female	999	756	73.3	(3.2)	976	666	66.2	(3.3)	747	219	29.2	(3.6)
<b>AGE:</b>												
18 - 29	260	104	39.0	(6.5)	254	163	35.2	(6.4)	102	14	14.7	(7.7)
30 - 44	502	333	66.4	(4.6)	495	288	58.7	(4.8)	331	36	22.0	(5.3)
45 - 64	608	513	83.8	(3.3)	603	463	76.0	(3.8)	507	171	34.0	(4.5)
65+	369	333	92.0	(2.8)	355	302	87.7	(3.5)	328	133	41.5	(6.1)
<b>Education:</b>												
<High School	429	108	62.3	(8.7)	153	94	57.3	(8.9)	107	44	40.9	(10.2)
High School	601	429	67.3	(4.4)	592	380	60.6	(4.5)	421	133	29.6	(4.6)
Some College	494	349	69.3	(4.6)	482	308	63.1	(4.8)	345	105	30.9	(5.7)
College Degree	483	396	81.5	(3.9)	478	360	74.9	(4.3)	395	105	28.3	(5.2)
<b>Income:</b>												
<\$10,000	81	50	58.3	(12.7)	79	46	53.0	(12.9)				
\$10,000 - \$19,999	233	147	58.4	(7.5)	230	127	50.9	(7.4)	144	52	36.6	(8.8)
\$20,000 - \$34,999	476	347	69.6	(4.3)	468	316	65.2	(4.8)	344	104	31.5	(5.7)
\$35,000 - \$49,999	267	203	74.5	(5.7)	267	184	67.6	(6.1)	203	55	26.8	(6.5)
\$50,000+	312	262	84.3	(4.6)	231	172	77.0	(5.3)	262	73	29.1	(6.4)
<b>Race:</b>												
White, non-Hispanic	1620	1211	72.8	(2.5)	1590	1078	66.2	(2.6)	1197	361	30.2	(2.9)
Non-white or Hispanic	116	68	51.2	(10.4)	114	64	49.3	(10.4)	67	24	35.2	(12.5)

\*Denominator is people who ever had cholesterol checked.

**Figure 7. Cholesterol Awareness, Montana Adults, 1990-1999.**



\*Denominator is people who ever had cholesterol checked.

# ALCOHOL CONSUMPTION

## Binge Drinking:

- Eighteen percent of Montana adults in 1999 indicated that on one or more occasions in the past month they consumed five or more alcoholic beverages.
- More than twice as many males (25%) as females (10%) reported binge drinking.
- The prevalence of reported binge drinking declined with increasing age class; from 35% of adults aged 18 to 29 to 5% for adults aged 65 and older.
- Ten percent of adults with less than a high school education reported binge drinking within the past month, while 21% of respondents with some college education reported binge drinking.
- There was no apparent difference in reported binge drinking between white non-Hispanic adults and non-white or Hispanic adults in Montana.

*Note: Binge drinking is defined as consuming 5 or more alcoholic drinks on one occasion in the past month.*

## Chronic Drinking:

- The self-reported prevalence of chronic drinking among Montana adults in 1999 was 4%.
- Seven percent of males reported chronic drinking, while less than 1% of females reported chronic drinking.
- Adults aged 18 to 29 (8%) were more likely to report chronic drinking than older adults (<3%).
- There were no discernable differences in the self-reported prevalence of chronic drinking according to education or income levels.
- Slightly more white, non-Hispanic adults (4%) reported chronic drinking than non-white or Hispanic adults (<1%).
- The prevalence of self-reported chronic drinking has remained relatively constant from 1990 to 1999.

*Note: Chronic drinking is defined as consuming 60 or more alcoholic drinks in the past month.*

## Drinking and Driving:

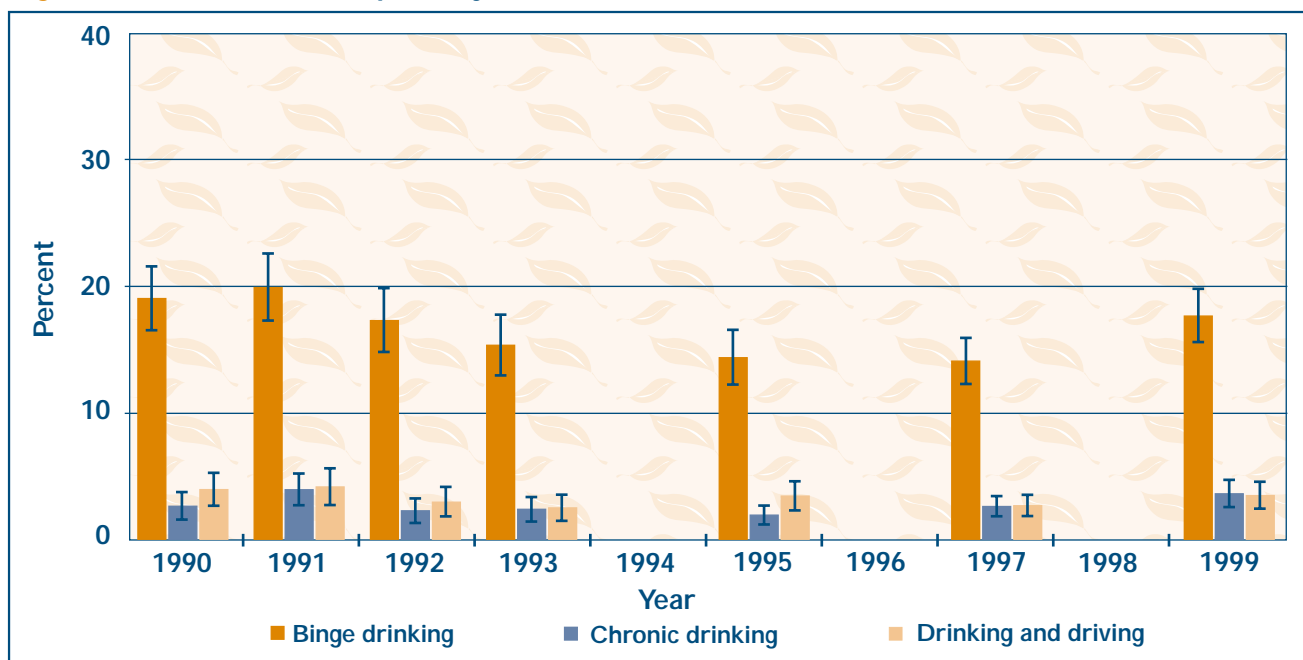
- In the 1999, 3% of adults indicated that they had driven when they “had perhaps too much to drink.”
- The self-reported prevalence of drinking and driving was higher among males (5%) than females (2%).
- The self-reported prevalence of drinking and driving was inversely associated with age. Less than 1% of adults aged 65 and older reported drinking and driving.
- Adults with a college degree (5%) were more likely to report drinking and driving than adults with less than a high school education (1%).
- There were no discernable differences in the prevalence of reported drinking and driving among income levels or race classes.
- Since 1990, the prevalence of reported drinking and driving among Montana adults has remained approximately the same.



**Table 9. Alcohol Consumption, Montana Adults, 1999 (with 95% confidence intervals).**

	Binge Drinking				Chronic Drinking				Drinking and driving			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults:</b>												
1999	1779	279	17.6	(2.1)	1756	56	3.6	(1.1)	1789	54	3.4	(1.0)
<b>Sex:</b>												
Male	755	190	25.2	(3.5)	742	49	7.0	(2.2)	761	35	5.2	(1.9)
Female	1024	89	10.4	(2.5)	1014	7	0.4	(0.3)	1028	19	1.8	(0.9)
<b>Age:</b>												
18 - 29	279	93	34.7	(6.3)	275	19	8.4	(4.1)	280	23	9.2	(4.0)
30 - 44	510	98	21.2	(4.2)	508	13	2.4	(1.5)	513	16	3.2	(1.7)
45 - 64	606	10	10.9	(2.6)	599	18	2.4	(1.2)	383	12	1.6	(1.0)
65+	383	17	4.5	(2.3)	373	6	2.2	(1.9)	386	3	0.7	(0.9)
<b>Education:</b>												
<High School	173	15	10.2	(5.4)	167	3	3.2	(3.6)	175	1	0.8	(1.6)
High School	612	95	16.8	(3.4)	479	20	3.5	(1.6)	614	18	3.3	(1.8)
Some College	507	98	21.8	(4.4)	476	21	4.5	(2.4)	509	15	3.2	(1.8)
College Degree	485	71	17.1	(4.0)	488	12	2.9	(2.0)	489	20	4.9	(2.4)
<b>Income:</b>												
<\$10,000	87	18	25.5	(11.7)	87	2	4.9	(8.0)	87	3	3.8	(4.5)
\$10,000 - \$19,999	236	35	17.3	(5.6)	234	9	3.5	(2.4)	238	5	2.5	(2.4)
\$20,000 - \$34,999	486	83	17.7	(4.0)	480	8	1.6	(1.4)	485	16	3.2	(1.8)
\$35,000 - \$49,999	273	42	15.5	(4.7)	272	8	2.6	(2.0)	274	12	4.1	(2.6)
\$50,000+	311	58	20.4	(5.2)	312	12	3.5	(2.3)	314	9	3.0	(2.3)
<b>Race:</b>												
White, non-Hispanic	1653	256	17.4	(2.2)	1635	55	3.8	(1.2)	1662	51	3.3	(1.0)
Non-white or Hispanic	121	22	18.5	(7.7)	116	1	0.4	(0.8)	122	2	2.5	(1.5)

**Figure 8. Alcohol Consumption by Montana Adults, 1990-1999.**



Binge Drinking = Consuming 5 or more alcoholic drinks on one occasion in the past month.  
 Chronic Drinking = Consuming 60 or more alcoholic drinks in the past month.

## INJURY PREVENTION

### How often does the child (aged 5 to 15) in your household wear a bicycle helmet?

- In 1999, 34% of Montana adults living with a child aged 5 to 15 years of age reported that the child always wears a helmet while riding a bicycle.
- The percentage of adults who reported that a child (aged 5 to 15) at home always wears a bicycle helmet increased from 23% ( $\pm$  5%) in 1995 to 34% in 1999.
- More adults aged 30 to 44 responded that a child (aged 5 to 15) at home always wears a bicycle helmet (37%) compared to adults aged 45 to 64 (22%).
- The percentage of adults who reported that a child (aged 5 to 15) at home always wears a bicycle helmet increased with increasing education level.

### Do you have a smoke detector in your home?

- Ninety-five percent of Montana adults reported in 1999 that they had a smoke detector in their home.
- There were no discernable differences associated with sex, age, education, income, or racial classes for the percentages of adults having a smoke detector in the home.
- The percentage of adults reporting that they had a smoke detector in the home increased slightly from 90% ( $\pm$  1%) in 1995 to 95% in 1999.

### When was the last time the smoke detectors in your home were tested?

- In 1999, 61% of Montana adults who reported having a smoke detector in the home said that they had checked the smoke detector in the past six months.
- Sixty-nine percent of adults with less than a high school education reported that they had checked their smoke detectors in the past six months compared to 53% percent of college graduates.
- The percentage of adults reporting that they had tested the smoke detector in their home in the past six months decreased slightly from 1995 (70%,  $\pm$ 3%) to 1999 (61%).

**Table 10. Injury Prevention, Montana Adults, 1999 (with 95% confidence intervals).**

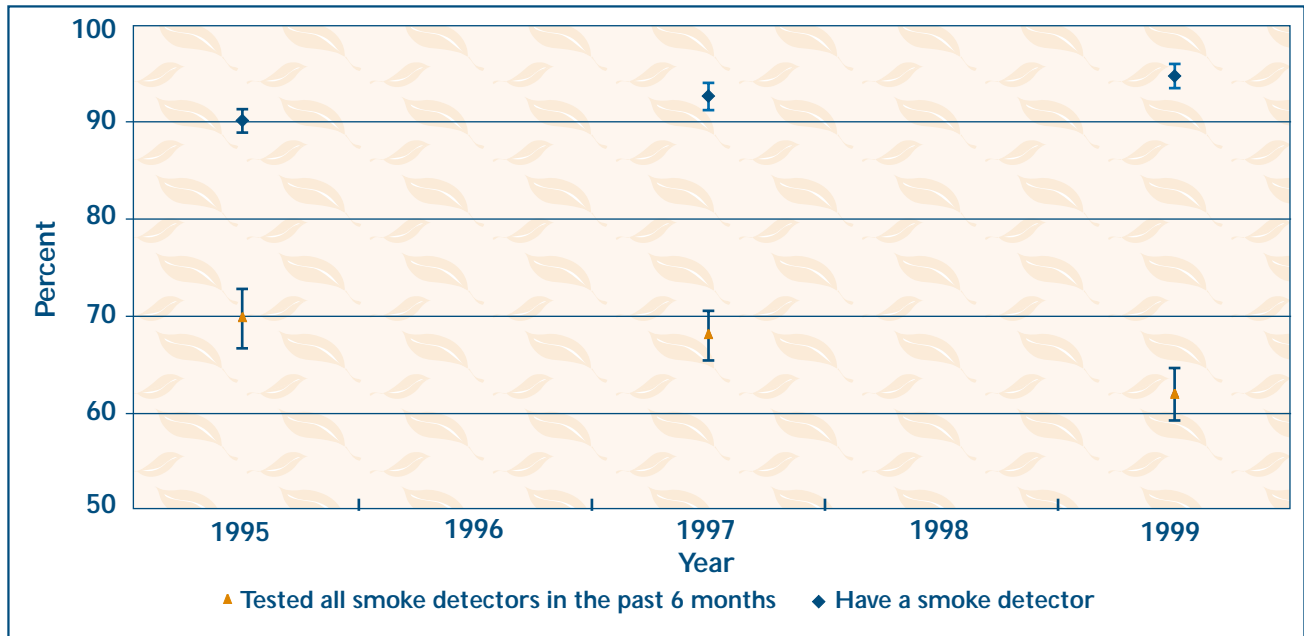
	Child always wears a bike helmet*				Have a smoke detector in the home				Tested smoke detector the past 6 months^			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults: 1999</b>	386	134	34.4	(5.2)	1631	1631	94.8	(1.2)	1544	950	61.2	(2.7)
<b>Sex:</b>												
Male	161	55	33.7	(7.8)	710	665	93.8	(2.1)	665	432	62.8	(4.1)
Female	225	79	35.1	(6.9)	921	879	95.8	(1.4)	879	518	59.6	(3.5)
<b>Age:</b>												
18 - 29	43				238	230	95.5	(3.7)	230	131	55.6	(7.1)
30 - 44	261	95	37.1	(6.5)	487	467	95.6	(2.1)	467	302	65.3	(4.7)
45 - 64	79	18	21.8	(9.9)	568	535	94.7	(2.0)	535	326	60.8	(4.5)
65+	3				336	311	93.1	(2.8)	311	191	61.0	(6.3)
<b>Education:</b>												
<High School	16				143	127	87.9	(6.6)	127	90	69.1	(9.2)
High School	120	28	24.6	(8.9)	571	544	95.8	(1.7)	544	339	62.2	(4.5)
Some College	125	44	35.7	(9.2)	460	435	94.4	(2.6)	435	281	65.8	(4.9)
College Degree	125	59	47.0	(9.5)	455	436	96.0	(2.0)	436	239	53.4	(5.3)
<b>Income:</b>												
<\$10,000	9				78	71	88.7	(10.3)	71	41	56.6	(13.2)
\$10,000 - \$19,999	38				224	205	92.1	(3.7)	205	144	70.8	(7.2)
\$20,000 - \$34,999	117	41	35.3	(9.5)	453	432	95.9	(1.9)	432	262	60.8	(5.0)
\$35,000 - \$49,999	77	19	25.4	(10.6)	252	243	96.8	(2.3)	243	147	59.2	(6.7)
\$50,000+	103	45	44.3	(10.7)	292	289	99.0	(1.2)	289	168	56.9	(6.5)
<b>Race:</b>												
White, non-Hispanic	346	122	35.2	(5.5)	1516	1436	94.8	(1.3)	1436	879	60.9	(2.8)
Non-white or Hispanic	40				112	106	95.2	(3.9)	106	70	66.6	(10.0)

\*Denominator is persons with a child aged 5 to 15 and whose child rides a bike.

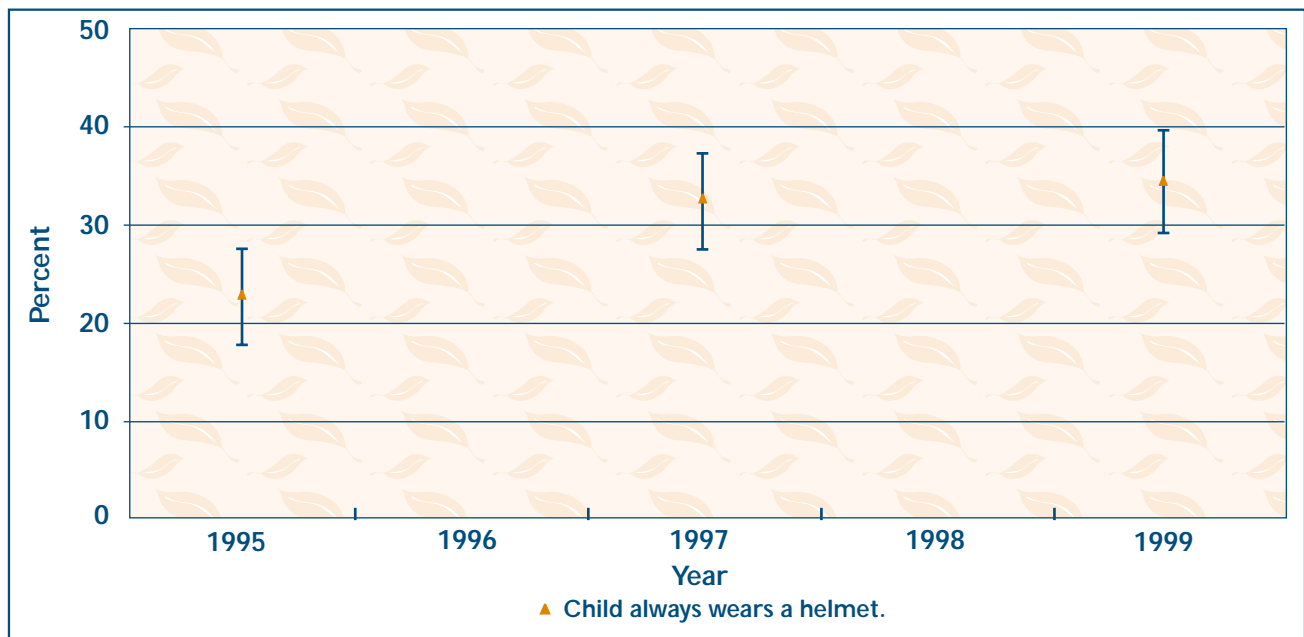
^Denominator is persons who have smoke detectors.



**Figure 9.** Montana Adults Who Have Smoke Detectors in the home, 1995-1999.



**Figure 10.** Bicycle Helmet Use by Children Aged 5 to 15, as Reported by Montana Adults, 1995-1999.



# TOBACCO USE

## Current cigarette smokers:

- Twenty percent of Montana adults in 1999 reported that they currently smoked cigarettes.
- The prevalence of smoking among Montana adults has remained virtually unchanged since 1990.
- Only 11% of adults aged 65 and older were current smokers; substantially less than adults in younger age classes ( $\geq 19\%$ ).
- Self-reported smoking was inversely associated with education and annual household income levels. Less than 10% of adults with a college degree or adults with annual household incomes of \$50,000 or more reported that they currently smoked cigarettes.
- More non-white or Hispanic adults (41%) reported that they smoked cigarettes than white, non-Hispanic adults (19%).

*Note: A current smoker is defined as someone who has ever smoked 100 cigarettes and who now smokes every day or some days.*

## QUIT SMOKING FOR AT LEAST ONE DAY IN PAST YEAR:

- In 1999, 48% of current smokers who smoked every day reported that they quit smoking for at least one day in the past year.
- More adults aged 18 to 29 (68%) quit for one or more days than adults in older age classes ( $\leq 47\%$ ).

## CURRENT SMOKELESS TOBACCO USERS:

- Six percent of Montana adults reported that they currently used smokeless tobacco in 1999.
- Self-reported smokeless tobacco use among Montana adults has remained approximately the same since 1990.
- More males reported using smokeless tobacco (13%) than females ( $< 1\%$ ).
- Self-reported smokeless tobacco use was highest among adults aged 18 to 29 ( $> 11\%$ ), while less than 3% of adults aged 65 and older reported using smokeless tobacco.

*Note: A current smokeless tobacco user is one who reported that they currently used either chewing tobacco, snuff, or both.*

## Healthy People 2000 Objectives:

- 3.4 Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.
- 3.6 Increase to at least 50 percent the proportion of cigarette smokers aged 18 and older who stopped smoking cigarettes for at least one day during the preceding year.

## Healthy People 2010 Objective:

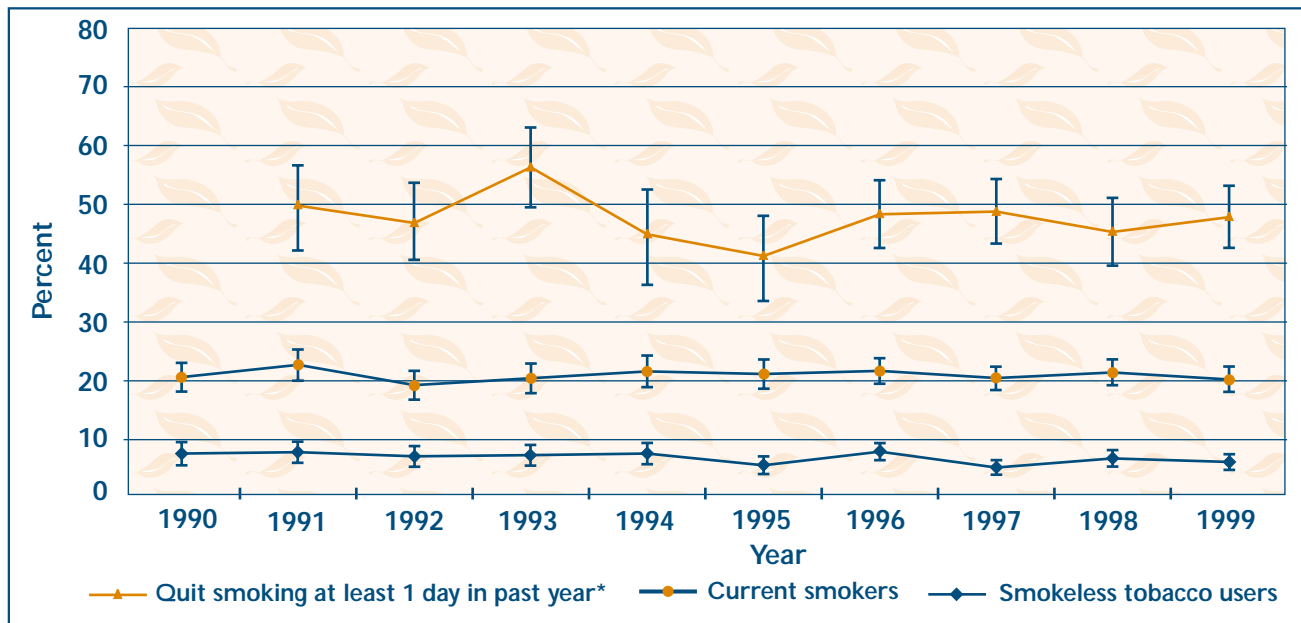
- 27-1a Reduce cigarette smoking by adults (to at least 12%).
- 27-5 Increase smoking cessation attempts by adult smokers (to at least 75 percent).

Table 11. Tobacco Use, Montana Adults, 1999 (with 95% confidence intervals).

	Current smoker				Quit smoking for at least 1 day*				Current smokeless tobacco			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults: 1999</b>	1795	369	20.2	(2.1)	304	146	48.0	(6.3)	1797	97	6.2	(1.3)
<b>Sex:</b>												
Male	767	144	18.5	(3.1)	113	57	53.0	(10.2)	767	94	12.5	(2.6)
Female	1028	225	21.9	(2.8)	191	89	44.5	(8.0)	1030	3	0.3	(0.3)
<b>Age:</b>												
18 - 29	280	68	23.8	(5.5)	51	34	68.3	(14.1)	280	30	11.3	(4.3)
30 - 44	492	132	25.1	(4.2)	108	47	40.0	(10.6)	516	39	8.4	(2.7)
45 - 64	613	121	19.1	(3.4)	105	48	46.6	(10.4)	614	21	3.2	(1.5)
65+	385	48	10.9	(3.2)	40				385	7	2.3	(1.8)
<b>Education:</b>												
<High School	175	55	32.0	(7.6)	48				174	8	5.4	(3.9)
High School	618	156	25.3	(3.9)	132	62	47.9	(9.6)	619	42	7.7	(2.5)
Some College	510	116	22.8	(4.2)	90	47	49.4	(12.4)	510	28	6.3	(2.5)
College Degree	490	42	7.0	(2.3)	34				491	19	4.6	(2.2)
<b>Income:</b>												
<\$10,000	87	38	44.6	(12.1)	33				87	3	5.8	(8.2)
\$10,000 - \$19,999	240	75	32.6	(7.0)	65	36	58.8	(13.3)	240	9	4.6	(3.1)
\$20,000 - \$34,999	487	113	23.9	(4.4)	96	54	55.6	(12.0)	487	38	8.5	(2.9)
\$35,000 - \$49,999	273	47	15.9	(4.5)	40				274	18	7.9	(3.7)
\$50,000+	314	31	9.0	(3.3)	23				314	13	4.3	(2.4)
<b>Race:</b>												
White, non-Hispanic	1669	323	18.7	(2.1)	272	125	46.3	(6.8)	1670	91	6.2	(1.4)
Non-white or Hispanic	122	46	40.5	(10.1)	32				122	5	3.6	(3.3)

\*Denominator is current smokers who smoke every day.

Figure 11. Tobacco Use, Montana Adults, 1990-1999.



\*Denominator is current smokers who smoke every day.



# DIABETES & IMMUNIZATION

## Were you ever told you have diabetes?

- In 1999, 6% of Montana adults reported that they had been told by a doctor that they had diabetes.
- The self-reported prevalence of diabetes among Montana adults in 1999 was 2.4% higher than in 1998.
- Adults aged 45 and older ( $\geq 8\%$ ) were more likely to have been told they had diabetes than younger adults ( $< 3\%$ ).

## Have you had a flu shot in the past year (aged 65 and older)?

- Seventy-three percent of adult Montanans aged 65 and older reported in 1999 that they had a flu shot in the past year.
- Influenza immunization rates increased between 1993 and 1999.
- There were no discernable differences between sexes, age classes, or education levels. (Since the 95% confidence intervals are so broad (e.g.,  $\pm 11\%$ ), the differences in immunization rates between college graduates and adults with less than a college degree may not be statistically different.)

## Have you ever had a pneumonia vaccination (aged 65 and older)?

- Sixty-one percent of Montana adults aged 65 and older reported that they had ever received a pneumonia vaccination in 1999.
- Broad confidence intervals obscure differences among subpopulations.
- From 1995 to 1999, the percentage of Montana adults aged 65 and older who had ever had a pneumonia vaccination increased from 35% ( $\pm 3\%$ ) to 61%.

## Healthy People 2000 Objective:

- 17.11 Reduce diabetes ... to a prevalence of no more than 25 per 1,000 people [i.e., 2.5%].
- 20.11 Increase pneumococcal pneumonia and influenza immunization among non-institutionalized, high-risk populations...to at least 60 percent.

## Healthy People 2010 Objective:

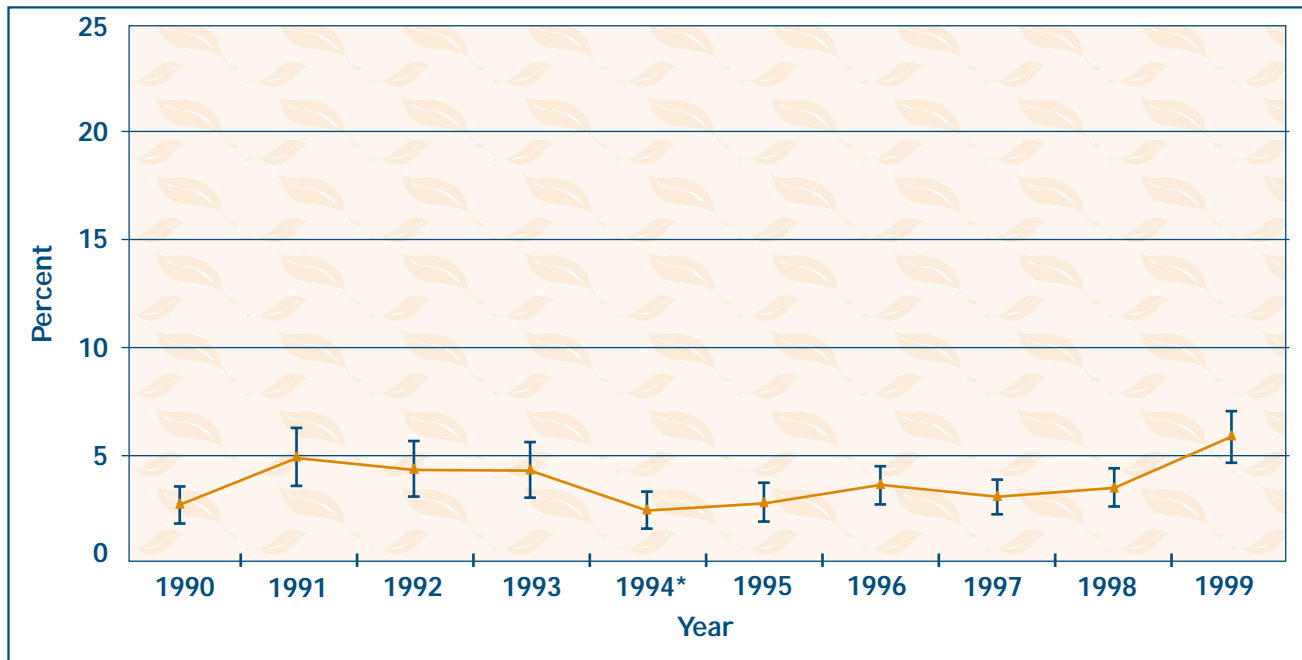
- 5-3 Reduce the overall rate of diabetes that is clinically diagnosed (to no more than 25 overall cases per 1,000 population).
- 14-29a Increase the proportion of non-institutionalized adults aged 65 and older who are vaccinated annually against influenza to at least 90 percent.
- 14-29b Increase the proportion of non-institutionalized adults aged 65 and older who were ever vaccinated against pneumococcal disease to at least 90 percent.

**Table 12. Diabetes and Immunization, Montana Adults, 1999 (with 95% confidence intervals).**

	Told have diabetes				Had a flu vaccination in past year*				Ever had a pneumonia vaccination*			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>All Adults: 1999</b>	1795	107	5.9	(1.2)	384	273	72.9	(4.8)	380	232	61.2	(5.4)
<b>Sex:</b>												
Male	767	49	6.5	(1.9)	124	90	72.8	(8.5)	122	75	60.7	(9.5)
Female	1028	58	5.4	(1.5)	260	183	72.9	(5.7)	258	157	61.5	(6.4)
<b>Age:</b>												
18 - 29	280	4	2.1	(2.3)								
30 - 44	516	10	1.8	(1.2)								
45 - 64	613	48	8.5	(2.5)								
65+	384	44	12.1	(3.7)								
65-74					217	156	72.7	(6.5)	217	131	59.6	(7.3)
75+					167	117	73.2	(7.1)	163	101	63.6	(8.0)
<b>Education:</b>												
<High School	174	16	7.8	(4.0)	88	60	71.7	(10.2)	87	53	62.0	(11.3)
High School	618	38	6.5	(2.2)	157	110	70.8	(7.7)	154	94	58.5	(8.5)
Some College	510	34	6.2	(2.2)	76	53	72.0	(11.2)	76	43	58.1	(12.3)
College Degree	490	19	4.2	(2.0)	62	50	80.1	(11.5)	62	42	69.0	(13.4)
<b>Income:</b>												
<\$10,000	86	3	2.6	(3.0)	19				19			
\$10,000 - \$19,999	240	23	9.6	(4.1)	57	41	70.5	(13.9)	56	34	58.0	(15.0)
\$20,000 - \$34,999	486	26	4.9	(2.0)	90	69	77.4	(9.3)	91	60	65.8	(10.6)
\$35,000 - \$49,999	273	10	4.7	(3.0)	28				28			
\$50,000+	314	12	3.6	(2.1)	21				21			
<b>Race:</b>												
White, non-Hispanic	1668	92	5.3	(1.2)	369	263	72.8	(5.0)	365	222	60.7	(5.6)
Non-white or Hispanic	122	14	11.1	(5.9)	12				12			

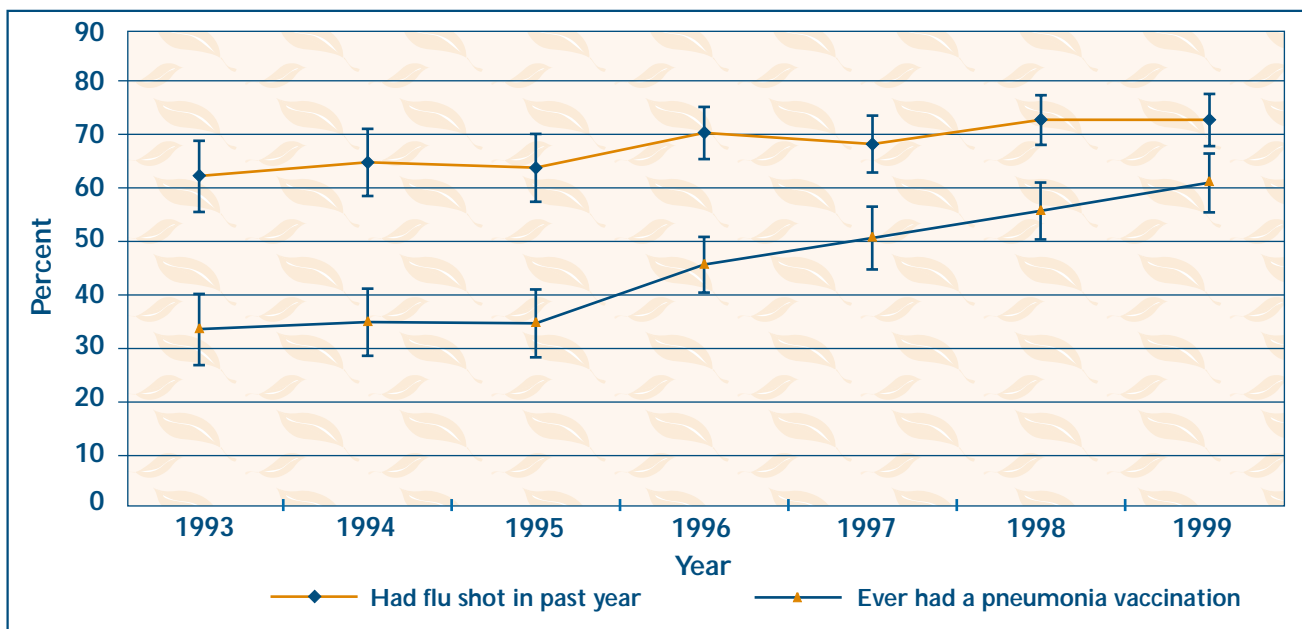
\*Denominator is persons aged 65 and older.

**Figure 12.** Prevalence of Diabetes Reported by Montana Adults, 1990-1999.



\*The question was changed in 1994 to exclude females with gestational diabetes.

**Figure 13.** Flu and Pneumonia Immunization Among Montana Adults Aged 65 and Older, 1993-1999.



# BREAST CANCER SCREENING

## Age 40 and older and ever had a clinical breast exam?

- Ninety-five percent of women aged 40 and older reported in 1999 that they had ever had a clinical breast exam.
- More women aged 40 to 49 (99%) reported they had ever had a clinical breast exam compared to women aged 75 and older (88%).
- Women with less than a high school education (87%) appear to be less likely to have ever had a clinical breast exam compared with women with more than a high school education.
- Education and income level appeared to have little influence on whether women aged 40 and older ever had a clinical breast exam.

## Age 40 and older and ever had a mammogram?

- Eighty-six percent of women aged 40 and older reported in 1999 that they had ever had a mammogram.
- More women aged with a college degree (95%) reported that they had ever had a mammogram than women with a high school education or less (81%).

## Age 40 and older and ever had both a mammogram and clinical breast exam?

- In 1999, 83% of women aged 40 and older reported they had ever had both a mammogram and clinical breast exam.
- The percentage of women aged 40 and older who reported they had ever had both a mammogram and clinical breast exam increased with increasing education level. Women with a college degree (91%) were more likely to have ever received both screening procedures than women with a high school education or less (<80%).

## Age 50 or older and had a clinical breast exam and mammogram in the past two years?

- In 1999, 66% of women aged 50 and older reported that they had had both a clinical breast exam and mammogram in the past two years.
- A higher percentage of women aged 50 to 74 (>67%) reported having had both examinations in the past two years compared to women aged 75 and older (58%).

## Healthy People 2000 Objective:

- 16.11 Increase to at least 80 percent the proportion of women aged 40 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those women aged 50 and older who have received them within the preceding 1 to 2 years.

## Healthy People 2010 Objective:

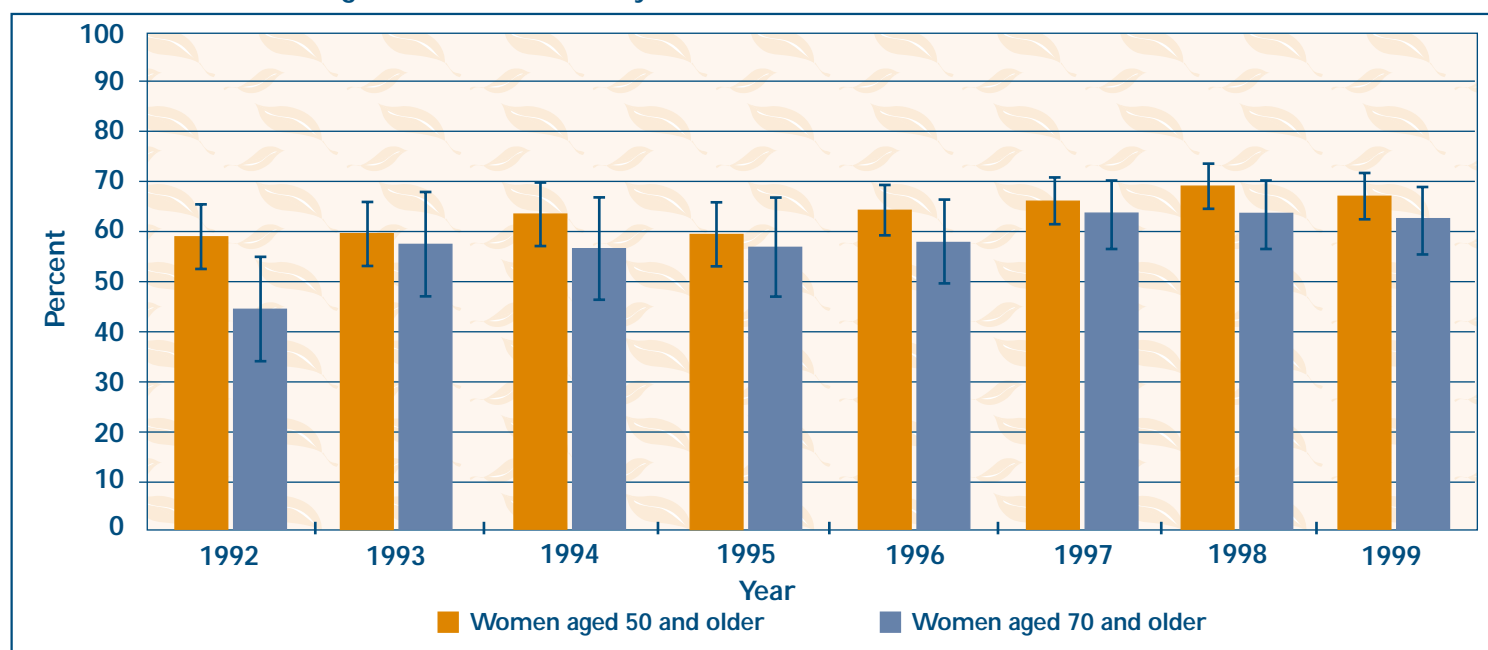
- 3-13 Increase the proportion of women aged 40 and older (to 70 percent) who have received a mammogram within the preceding 2 years.



**Table 13. Breast Cancer Screening, Montana Women Aged 40 and Older, 1999 (with 95% confidence intervals).**

	Ever had a clinical breast exam				Ever had a mammogram				Ever had a mammogram and clinical breast exam				Age 50+ and had both in past 2 years			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>Females 40+ 1999</b>	702	666	95.2	(1.7)	702	598	85.8	(2.8)	702	580	83.1	(3.0)	476	305	66.4	(4.5)
<b>Age:</b>																
40-49	217	215	98.9	(1.5)	217	181	82.6	(5.7)	217	181	82.6	(5.7)	N/A			
50-64	224	216	97.0	(2.2)	224	194	87.5	(4.6)	224	191	86.4	(4.7)	224	153	69.4	(6.4)
65-74	135	123	91.3	(5.2)	135	118	89.2	(5.2)	135	112	84.1	(6.5)	135	88	67.7	(8.4)
75+	126	112	88.0	(6.9)	126	105	84.8	(6.4)	126	96	76.0	(8.4)	117	64	57.9	(9.7)
<b>Education:</b>																
<High School	75	65	86.9	(9.2)	75	59	81.0	(9.1)	75	54	73.4	(11.2)	62	34	58.7	(13.8)
High School	271	255	94.7	(2.7)	271	218	81.0	(5.1)	271	212	79.1	(5.3)	193	121	66.4	(6.9)
Some College	187	182	97.9	(2.0)	187	162	87.1	(5.2)	187	159	85.6	(5.4)	129	83	67.1	(8.6)
College Degree	167	163	96.8	(3.3)	167	158	94.7	(3.6)	167	154	91.4	(4.8)	90	67	71.3	(10.6)
<b>Income:</b>																
<\$10,000	37				37				37				26			
\$10,000 - \$19,999	104	100	97.1	(2.9)	104	86	84.2	(7.4)	104	85	83.4	(7.5)	87	46	54.0	(11.4)
\$20,000 - \$34,999	178	171	96.9	(2.3)	178	154	85.4	(5.7)	178	152	84.6	(5.7)	116	80	70.3	(8.9)
\$35,000 - \$49,999	92	90	97.2	(3.8)	92	80	86.6	(7.5)	92	78	83.8	(8.2)	48			
\$50,000+	104	102	98.4	(2.3)	104	95	90.2	(7.3)	104	94	89.7	(7.4)	40			
<b>Race:</b>																
White, non-Hispanic	662	626	94.8	(1.8)	622	567	86.4	(2.8)	662	549	83.5	(3.1)	456	292	66.5	(4.6)
Non-white or Hispanic	38				38				38				19			

**Figure 14. Percent of Montana Women (aged 50+ and 70+) Who had Both a Clinical Breast Exam and Mammogram in the Past Two years, 1992-1999.**



# CERVICAL CANCER SCREENING

## Have you ever had a Pap test?

- Ninety-seven percent of adult Montana women reported in 1999 that they had ever had a Pap test.
- The percentage of women who had ever had a Pap test has remained approximately the same since 1992.
- There were no statistical differences in self-reported prevalences of ever having had a Pap test according to age or annual household income levels.
- Eighty-four percent of women with less than a high school education reported that they had ever had a Pap test, while nearly 100 percent of women with a college degree reported having had the test.

## Have you had a Pap test in the past three years?

- In 1999, the percentage of women who reported that they had had a Pap test within the past three years was 85%.
- The percentages of women having had a Pap test in the past three years have remained relatively unchanged since 1992, for all adult women and for women aged 70 and older.
- Fewer women aged 65 and older (73%) reported having had a Pap test in the past three years compared with women in younger age classes (>85%).
- Women with a high school degree or more education (>84%) were more likely to have been screened in the past three years than those women with less than a high school education (64%).

## Healthy People 2000 Objective:

- 16.12 Increase to 95 percent the proportion of women aged 18 and older who have ever received a Pap test, and to at least 85 percent those who received a Pap test within the preceding 1 to 3 years.

## Healthy People 2010 Objective:

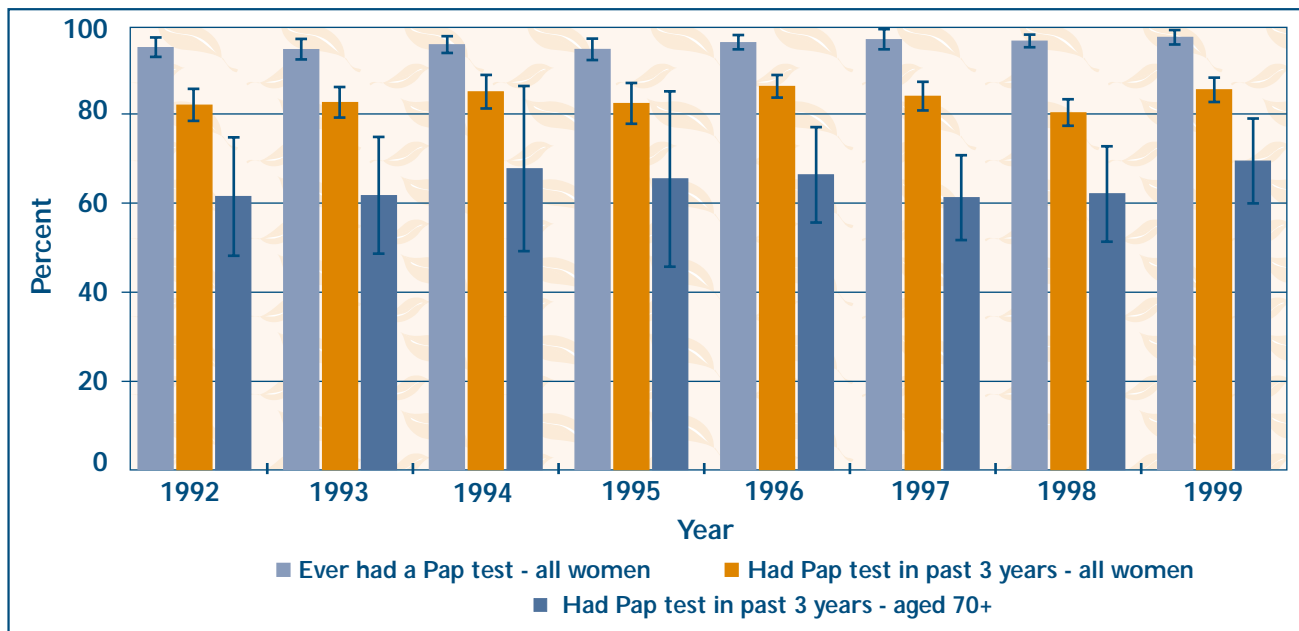
- 3-11a Increase the proportion of women aged 18 and older who have ever received a Pap test to at least 97%.
- 3-11b Increase the proportion of women aged 18 and older who have received a Pap test within the preceding 3 years to at least 97%.

**Table 14. Cervical Cancer Screening, Montana Adult Women, 1999**  
(with 95% confidence intervals).

	Ever had a Pap test*				Had Pap test in past 3 years*			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>Adult Females:</b>								
1999	759	739	97.0	(1.7)	753	640	85.2	(2.9)
<b>Age:</b>								
18 - 29	148	141	94.5	(4.4)	148	136	91.5	(5.1)
30 - 44	262	259	98.0	(3.3)	262	230	85.9	(5.2)
45 - 64	202	200	99.1	(1.3)	201	171	85.2	(5.2)
65+	147	139	95.3	(3.3)	142	103	73.2	(8.0)
<b>Education:</b>								
<High School	56	49	84.3	(12.8)	55	36	64.0	(15.1)
High School	259	252	96.6	(3.5)	255	215	84.1	(5.3)
Some College	240	235	98.3	(1.6)	239	203	87.1	(4.3)
College Degree	203	202	99.7	(0.7)	203	186	90.9	(4.3)
<b>Income:</b>								
<\$10,000	41				41			
\$10,000 - \$19,999	102	100	97.8	(3.4)	102	84	83.9	(7.6)
\$20,000 - \$34,999	232	230	99.5	(0.7)	230	202	88.1	(4.4)
\$35,000 - \$49,999	106	103	97.8	(2.6)	106	93	86.7	(7.0)
\$50,000+	124	123	96.7	(6.4)	124	113	88.9	(7.7)
<b>Race:</b>								
White, non-Hispanic	700	680	96.7	(1.8)	694	587	84.8	(3.0)
Non-white or Hispanic	58	58	100.0	N/A	58	53	90.7	(8.3)

\*Denominator is all adult women with an intact uterine cervix.

**Figure 15. Percent of Adult Montana Women (with intact cervix) Having Pap Tests, 1992-1999.**



# COLORECTAL CANCER SCREENING

## **Age 50 and older and ever had a sigmoidoscopy or colonoscopy:**

- In 1999, 43% of Montana adults aged 50 and older reported that they had ever had a sigmoidoscopic or colonoscopic exam.
- More adults aged 65 and older ( $\geq 52\%$ ) reported that they had ever had a sigmoidoscopic or colonoscopic exam compared to adults aged 50 to 64 (35%).
- Small sample sizes and broad confidence intervals obscure differences in percentages among subpopulations.

## **Age 50 and older and had a home blood stool test in the past two years:**

- Twenty-six percent of Montana adults aged 50 and older reported in 1999 that they had had a home blood stool test within the past two years.
- Small sample sizes and broad confidence intervals obscure differences in percentages among subpopulations.

## **Healthy People 2000 Objective:**

- 16.13 Increase to at least 50 percent the proportion of people aged 50 and older who have received fecal occult blood testing within the preceding 1-2 years, and to at least 40 percent those who have ever received proctosigmoidoscopy.

## **Healthy People 2010 Objective:**

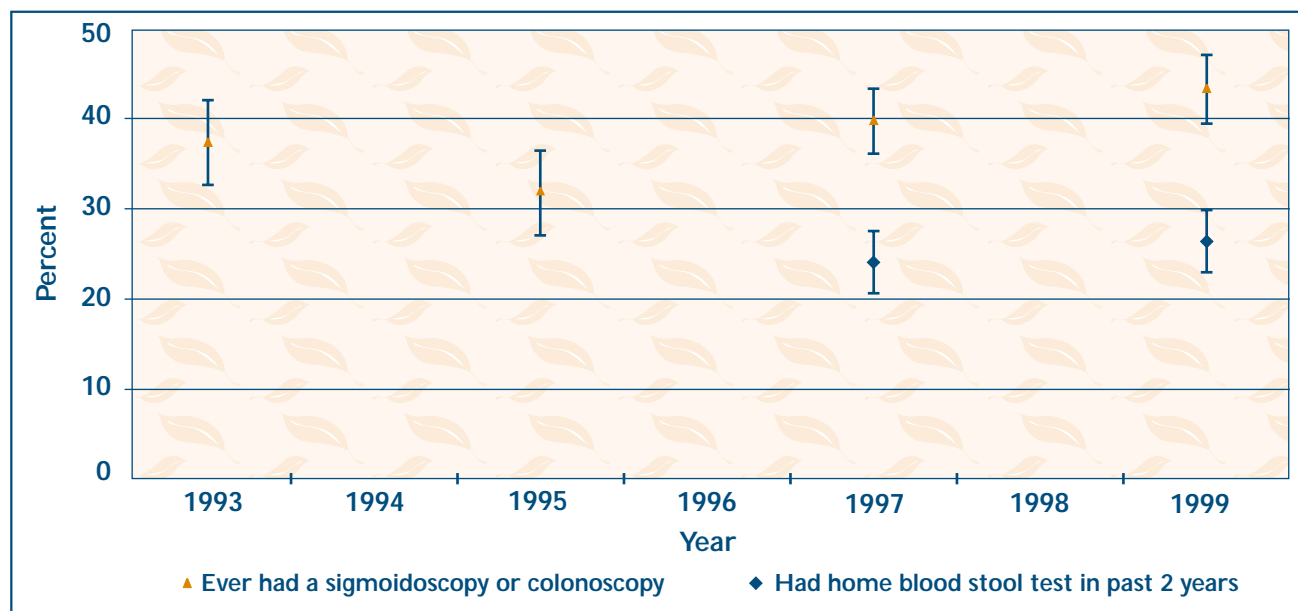
- 3-2a Increase the proportion of adults aged 50 and older who have received a fecal occult blood test within the preceding 2 years to at least 50 percent.
- 3-2b Increase the proportion of adults aged 50 and older who have ever received a sigmoidoscopy to at least 50 percent.



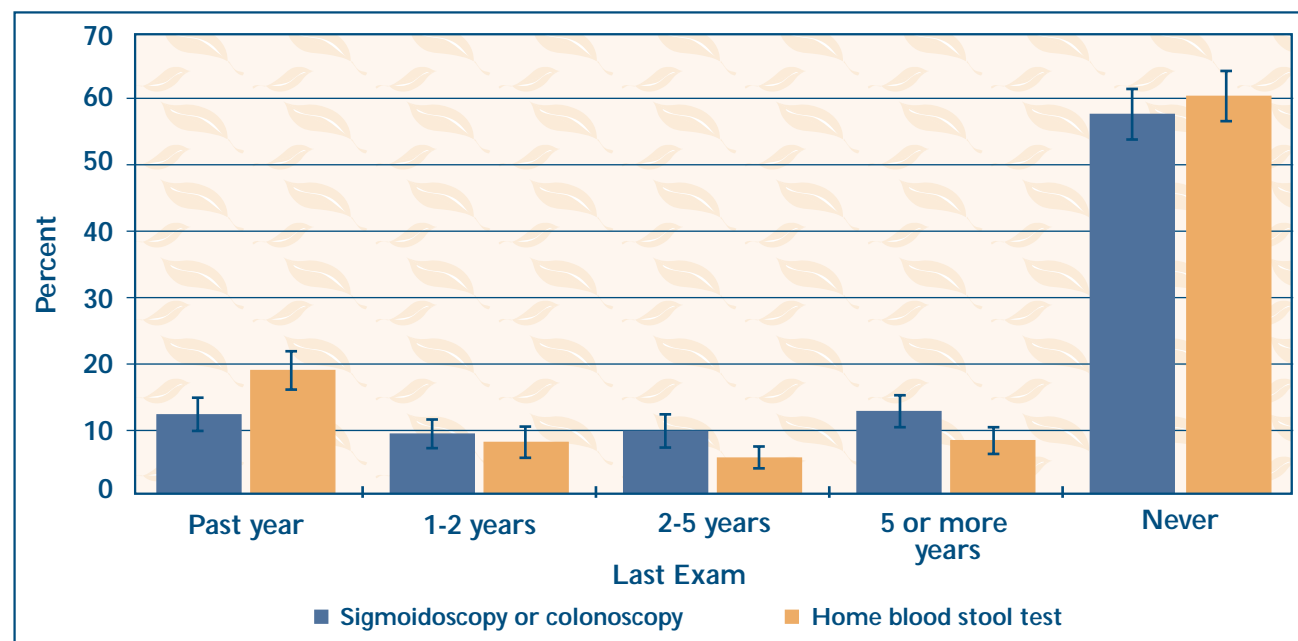
**Table 15. Colorectal Cancer Screening, Montana Adults Aged 50 and Older, 1999 (with 95% confidence intervals).**

	Ever had a proctoscopic exam				Had a home blood stool test in past 2 years			
	Total No.	No.	%	CI (+/-)	Total No.	No.	%	CI (+/-)
<b>Adults 50+ 1999</b>	798	342	43.2	(3.8)	792	203	26.4	(3.5)
<b>Sex:</b>								
Male 50+	319	136	43.3	(6.1)	316	67	22.4	(5.4)
Female 50+	479	206	43.1	(4.8)	476	136	29.8	(4.5)
<b>Age:</b>								
50 - 64	420	147	34.5	(4.9)	417	104	25.0	(4.4)
65 - 74	216	110	52.1	(7.5)	214	57	28.6	(7.4)
75+	162	85	54.1	(8.4)	161	42	27.0	(7.5)
<b>Education:</b>								
<High School	107	52	52.7	(10.4)	108	27	26.1	(9.1)
High School	290	120	40.8	(6.1)	288	74	26.1	(5.5)
Some College	206	78	36.8	(7.1)	203	50	23.6	(6.2)
College Degree	192	91	47.8	(8.3)	190	52	29.9	(8.0)
<b>Income:</b>								
<\$10,000	36				37			
\$10,000 - \$19,999	115	48	41.9	(10.5)	116	30	24.9	(8.8)
\$20,000 - \$34,999	187	82	42.6	(7.6)	186	52	27.0	(6.8)
\$35,000 - \$49,999	102	48	51.5	(10.4)	100	31	33.7	(10.1)
\$50,000+	107	38	37.6	(11.3)	106	26	28.1	(11.2)
<b>Race:</b>								
White, non-Hispanic	757	330	44.1	(3.9)	754	196	27.0	(3.6)
Non-white or Hispanic	39				35			

**Figure 16.** Colorectal Cancer Screening, Montana Adults Aged 50 and Older, 1993-1999.



**Figure 17.** Time Since Last Colorectal Cancer Screening, Montana Adults Aged 50 and Older, 1999.



# APPENDIX A

## Year 2000 Health Objectives for the Nation: Montana Summary of BRFSS<sup>1</sup> Data for 1999

Healthy People 2000 <sup>2</sup> Objective <sup>1</sup>	Yr 2000 Target	Montana 1999 (CI)*
<b>Overweight (Objective 1.2)</b> (males: BMI $\geq 27.8$ ; females: BMI $\geq 27.3$ ) Ages $\geq 20$	$\leq 20\%$	30.5% ( $\pm 2.4\%$ )
<b>Cigarette Smoking (Objective 3.4)</b> Ages $\geq 18$	$\leq 15\%$	20.2% ( $\pm 2.1\%$ )
<b>Stopped smoking cigarettes for at least 1 day during the preceding year (Objective 3.6)</b> Ages $\geq 18$	$\geq 50\%$	48.0% ( $\pm 6.3\%$ )
<b>Blood Pressure Screening (within past two years) (Objective 15.13)</b> Ages $\geq 18$	$\geq 90\%$	93.3% ( $\pm 1.3\%$ )
<b>Cholesterol Screening (within past five years) (Objective 15.14)</b> Ages $\geq 18$	$\geq 75\%$	65.0% ( $\pm 2.6\%$ )
<b>No Permanent Tooth Loss Due to Caries or Periodontal Diseases (Objective 13.3)</b> Ages 35 - 44	$\geq 45\%$	65.2% ( $\pm 5.1\%$ )
<b>Total Tooth Loss (Objective 13.4)</b> Ages $\geq 65$	$\leq 20\%$	29.3% ( $\pm 4.9\%$ )
<b>Regular Dental Visits (within past year) (Objective 13.4)</b> Ages $\geq 35$	$\geq 70\%$	64.3% ( $\pm 2.8\%$ )
<b>Clinical Breast Exam and Mammogram (ever had) (Objective 16.11)</b>		
Women ages $\geq 40$	$\geq 80\%$	83.1% ( $\pm 3.0\%$ )
Women ages $\geq 70$	$\geq 80\%$	79.9% ( $\pm 5.9\%$ )
Low-income (annual family income $< \$10,000$ ) women ages $\geq 40$	$\geq 80\%$	Insufficient Data

\*95% confidence interval ( $\pm \%$ )

## APPENDIX A

Healthy People 2000 <sup>2</sup> Objective <sup>3</sup>	Yr 2000 Target	Montana 1999(CI)*
<b>Clinical Breast Exam and Mammogram (within past two years) (Objective 16.11)</b>		
Women ages ≥50	≥60%	66.4% (±4.5%)
Women ages ≥70	≥60%	62.0% (±7.2%)
Low-income (annual family income <\$10,000) women ages ≥50	≥60%	Insufficient Data
<b>Pap Smear, Women with Intact Uterine Cervix (ever had) (Objective 16.12)</b>		
Ages ≥18	≥95%	97.0% (±1.7%)
Ages ≥70	≥95%	93.7% (±4.5%)
Low-income (annual family income <\$10,000) women ages ≥18	≥95%	Insufficient Data
<b>Pap Smear, Women with Intact Uterine Cervix (within past three years) (Objective 16.12)</b>		
Ages ≥18	≥85%	85.2% (±2.9%)
Ages ≥70	≥70%	69.2% (±9.6%)
Low-income (annual family income <\$10,000) women ages ≥18	≥80%	Insufficient Data
<b>Sigmoidoscopy (ever had) (Objective 16.13)</b>		
Ages ≥50	≥40%	43.2% (±3.8%)
<b>Fecal Occult Blood Test (using home kit, with in past two years) (Objective 16.13)</b>		
Ages ≥50	≥50%	26.4% (±3.5%)
<b>Diabetes Prevalence (Objective 17.11)</b>		
Ages ≥18	≤2.5%	5.9% (±1.2%)
<b>Influenza Immunization (within past year) (Objective 20.11)</b>		
Ages ≥65	≥60%	72.9% (±4.8%)
<b>Pneumococcal Pneumonia Immunization (ever had) (Objective 20.11)</b>		
Ages ≥65	≥60%	61.2% (±5.4%)

\* 95% confidence interval (±%)

<sup>1</sup> Behavioral Risk Factor Surveillance System

<sup>2</sup> Public Health Service. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC: U.S. Department of Health and Human Services, Publication No. PHS 91—50212; 1991.

<sup>3</sup> In some cases, BRFSS definitions of objectives differ slightly from those in Healthy People 2000. See Healthy People 2000 for the exact definition of the objective.



## APPENDIX B

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#### Centers for Disease Control and Prevention, BRFSS website

Access BRFSS data for any state  
[www.cdc.gov/nccdphp/brfss](http://www.cdc.gov/nccdphp/brfss)





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